ICBMD

International Conference on
Business and Management Dynamics

Overview

International Conference on Business and Management Dynamics (ICBMD-2019)

Theme: Managing business competitiveness in times of glocalization

Swakopmund Hotel and Entertainment Centre, Namibia
September 2–4, 2019

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Editorial

Introduction: The ICBMD annually provides researchers, government, practitioners and partners a unique opportunity to share their perspectives with each others. Accepted papers are informative and provide guidance towards a better understanding of the importance of *inter alia* access to information, innovation and vigilance in driving local and global business opportunities, growth and competitiveness. ICBMD has always been a paperless conference and in 2019 introduced virtual presentation (via Skype) to enable certain authors who could not travel to share their research outputs with delegates.

Quality Process/Copyright/Ethics/Confidentiality: All manuscripts are subject to double blind peer review. Papers are initially scrutinized and screened by the editor and members of the editorial board for relevance, scope, quality and similarity and then by experienced reviewers around the world. All authors are made aware of the importance of submitting work that is based on their own research and expressed in their own words. It is the policy of ICBMD to welcome submissions for consideration which are original and not under consideration for any other publication at the same time. Authors are encouraged to ensure that they have written entirely original works. If the authors have used the work and/or words of others it has been appropriately cited or quoted. ICBMD Copyright Policy is specifically aimed at promoting and protecting authors' work.

The ICBMD editor is responsible for deciding which of the papers submitted to the journal should be published. The editor is guided by the policies of the journal's editorial board and constrained by such legal requirements as shall then be in force regarding libel, copyright infringement and plagiarism. Furthermore, the editor may consult with other editors or reviewers in making the decision. The editor at any time evaluate manuscripts for their intellectual content without regard to race, gender, sexual orientation, religious belief, ethnic origin, citizenship, or political philosophy of the authors. The ICBMD editor and editorial staff are bound not to disclose any information about a submitted manuscript to anyone other than the corresponding author, reviewers, potential reviewers, other editorial advisers, and the publisher, as appropriate.

ICBMD-2019: The 2019 International Conference on Business and Management Dynamics (ICBMD) was held at Swakopmund Hotel and Entertainment Centre, Swakopmund, Namibia on September 2-4, 2019. Cape Peninsula University of Technology hosted the conference together with partners and Co-hosts: University of Namibia School of Business, Namibia, University of Fort Hare, South Africa, North-West University, South Africa, University of KwaZulu Natal, South Africa and the International University of Management, Namibia. The ICBMD has a credible reputation of being at the forefront of exploring contemporary issues, challenges and opportunities. Given the list of abstracts and full papers, the ICBMD-2019 conference again was a cutting-edge, contentious and thought provoking, in addressing the theme of '*Pragmatic business solutions by Africa for Africa*'. Reputed and world renowned speakers from different organizations and universities share their valuable thoughts during the conference. The conference received research submissions from various

countries related to conference theme and tracks. Total 62 delegates attended the conference and 44 papers were presented. The Conference qualified for subsidy as approximately over 70% of the papers were from outside the host University i.e. CPUT. ICBMD-2019 conference proceedings will be an Open Access publication by the collaboration of CPUT and IFRD Open Access publication of Conference Proceeding division.

Conclusion: We thank the authors for their submission and contribution. We also acknowledge and appreciate the support of the organizing and the scientific committees, who worked tirelessly in reviewing papers and providing feedback to authors. We also grateful to our partners and collaborators. According to the feedback, delegates found ICBMD-2019 interesting and informative and that the technical sessions provide valuable opportunities for academic discourse with other like-minded researchers, partners and practitioners at the conference.

Note: The proceedings can be referenced or cited as: Molebatsi, G., 2019, 'Utilization of electronic filing systems in South Africa,' in M. Twum-Darko (ed.), Proceedings of the 5th International Conference on Business and Management Dynamics 2019: Pragmatic business solutions by Africa for Africa, IFRDs, UAE. PP. 9-16.

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Speakers

Guest Speaker: Luvuyo Ran

Mr Luvuyo Rani who comes from the Eastern Cape Province of South Africa with very little exposure to IT established Silulo Technology with his brother, Lonwabo, in 2004 to provide IT services to the townships of South Africa. Silulo Ulutho Technology (i.e., "we bring value through technology") which started as a single internet café in the Western Cape's Khayelitsha Township has in 15 years grown from a single internet café to over US$2 million company that offers computer training courses, internet café and business centre services, and IT retail and repairs across the Western Cape Province. South Africa. Today Silulo is a household name in Khayelitsha, praised for empowering residents through convenient and affordable access to technology and Silulo's SETA certified training programs. Silulo graduates, 60% of whom are unemployed when they start, have gone on to work as call centre operators, IT sales representatives, and Silulo employees. In 2010, Silulo established a partnership with the African cellular network Vodacom. In exchange for rights to sell their products on a revenue share basis at Silulo cafes, Vodacom financed the roll-out of new Silulo centres, refurbished existing stores, and provided mobile technology training support to all of Silulo's staff. Now operating over 42 branches in three provinces – Western Cape, Eastern Cape and KwaZulu-Natal – and 22 franchise stores, some owned by former Silulo Ulutho employees, Silulo's all-in-one approach to IT products and services is playing an integral role in empowering and creating opportunities for people through IT knowledge and access their community. Silulo was named the 2016 Schwab Social Entrepreneur of the Year. Rani, who was part of Team South Africa to attend the World Economic Forum in Davos, Switzerland in 2018, has received numerous accolades for his social impact business. He was invited to attend a Leadership for Systems Change programme at Harvard University in 2018.

Keynote Speaker: Mr Bisey Uirab

Mr Bisey Uirab who is the newly appointed CEO of Namibia Airport Company has vast experience and track record in the Transport Sector of Namibia is his appointment was seen as a great benefit to NAC. Before his new appointment to NAC, Bisey was the CEO of Namport – Namibia Ports Authority. He was the youngest and best performing CEO in 2014 in Namibia. Mr Bisey is an MBA product of Edinburgh Business School in Scotland. Before joining Namport, Bisey occupied many senior positions in the Financial, Telecommunication and Educational Sectors of the Namibian Economy. Mr Bisey's focus now will be to provide leadership to the NAC by stabilizing the organization, its operations and creating value for its brand.

Keynote Speaker: Mr Sakaria

Currently the CEO of Agribank since 1 August 2016 and widely regarded as a highly effective and transformational business leader, Mr Sakaria previously led the transformation of Namibia Post Ltd as its Chief Executive Officer, and latterly served as Chief Executive Officer of Operations at Old Mutual in Namibia and as Managing Director of Old Mutual Short-term Insurance Company (Namibia) Ltd. In the latter role, Nghikembua led the successful integration of the former Mutual and Federal Insurance Company of Namibia Ltd into Old Mutual Holdings (Namibia). He is also the Chairman of MMI Namibia Holdings and serves as an Independent Non-Executive Director on Momentum Short-term Insurance (Namibia). Mr Nghikembua holds a Bachelor of Economics degree (A-average) from the University of Namibia and a Master of Science degree in Financial Economics from the University of London; and has completed an Executive Development Programme (EDP) from the University of Cape Town. In addition, Nghikembua has completed various Strategy and Leadership courses from the University of Wits (SA), INSEAD in France and the Old Mutual Business School (SA).

Keynote Speaker: Dr David R. Namwandi

Dr. David R. Namwandi is a Namibian politician and academic, who served as the Minister of Education from 2013 to 2015. Namwandi previously served as Deputy Minister of Education from 2010 to 2013. He is a member of SWAPO Party, Namibia's ruling party. Dr. Namwandi is the Founder and Chairman of the International University of Management (IUM), one of the co-conveners of ICBMD-2019. He holds various professional and academic qualifications from Africa, Europe and Asia including an MBA, a Doctoral Award as well as a PhD in Business Administration from Asia e University (AeU) – Malaysia. He is a recipient of the following awards:

An International Award for outstanding contribution to Education from Central Bank of India, 2012;

An International B-School Leadership i.e. Educational Excellence Award from Le Matinal, Mauritius, 2011;

The Education Leadership Award at the World Marketing Summit in 2013, Malaysia.

Lifetime Achievement Award from Chartered Institute of Management Accountants (CIMA) during the World Education Congress on 23rd July 2015 in Mumbai, India; and

Namibia Business Hall of Fame Award on the 17th November 2017.

He is the owner and current Group Chairman of Onambambi Holdings (Pty) Ltd Namibia, which has subsidiary companies venturing into transport, properties, investments, fishing, hospitality, security services and farming.

Research Articles

Paper 1

21st century graduate in Namibia: An entrepreneurial education perspective

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Abstract: Entrepreneurship originated in the 12th and the 13th centuries from a French verb, *entreprendre (which means "to take your hands and do something")* and was officially introduced in the academia in the 1700's by the eminent economist Richard Cantillion, where he emphasized the importance of the risk taker in production. Since then a number of scholars have looked at entrepreneurship from various perspectives namely, sociology, behavioural and management. Yet there is no universally accepted definition of entrepreneurship in the international literature. Today entrepreneurship has become a buzzword and has been encouraged across all sectors of various economies around the world and in Namibia. It is important to Namibia that the 21st century graduate should embody skills to make an impact as entrepreneurs in these turbulent economic times. In terms of practice in the Namibian classrooms, entrepreneurship is more of a theoretical content-based subject, which is far away from what it should be. This paper wishes to explore various ways in which the theoretical content from the various management schools of thought and the theories of adult learning can help acquisition of skills that the 21st century Namibian graduate needs. More particularly, the paper wishes to scan from the primary school phase to tertiary in terms of competency levels and the skill deficiency as students' transition into the world of work. The authors intend to interview twenty five (25) Namibian respondents at the three institutions of higher learning namely, International University of Management (IUM), University of Namibia (UNAM) and Namibia University of Science and Technology (NUST). The findings from this research can have implications for policy and can aid a better understanding both of the tools that the students in universities must possess and of the guidance that the academics and the stakeholders need to equip the students with the entrepreneurial skills they need to contribute to the economy.

Keywords: Namibia, Entrepreneurship, 21st century graduate, adult learning & entrepreneurial skills

1. Introduction

Entrepreneurship is a multidimensional term which is at times very difficult to define (Caree and Thurik, 1998). In certain instances, the multidimensionality of the terms gives the challenge of measuring entrepreneurial activities and as a consequence the degree to which they impact the performance of business. Although it is the assumption from many economists that individual accomplishments are at the forefront of entrepreneurship, one should note that once the business is developed the collective behaviour of people in an organization can lead to excellence. Therefore Panda (2000) noted that entrepreneurship does not only look at the design of the business idea, but critical factors such as projection and the maintenance of the organization is important for the longevity and success of the business. However, it is important to look at the Namibian 21st Century Graduate through the lens of entrepreneurial education, and the transition Namibia has made since independence to contribute positivity to skills development.

More importantly it is the thrust of this paper to look at the output of the Namibian school system since independence, curriculum options of the Namibian schools, opportunities that the Namibian child has as a result of these programs, the role of various stakeholders to the Namibian education system. The fundamental problem that this paper intends to address is that some Namibians do not acquire the ability to learn from experience, to learn skills and to perform at their optimal when required the most. This becomes very critical when the students graduate from institutions of higher learning, where their fail to view

themselves as the job, rather they are hoping that someone will employ them. This was possible a few years ago, but with the tremendous pressure on the Namibian government with the current financial crises, which crippled most businesses globally, this remains a major challenge. This paper wishes to demonstrate to the reader the importance of acquiring entrepreneurial skills through education and the understanding that learning is a vicious cycle, which never ends. Various scholars suggested that entrepreneurship and the acquisition of managerial skills can only be learned through repetition, this paper suggest that schools and universities in Namibia play a significant role to help students to develop an art of learning skills which can help them to be the job, rather than waiting for the government to employ them. A major paradigm shift is required in terms of the Namibian education system and learners and students must be aware of what the country needs, so that they are market ready to satisfy the unsatisfied needs in the country.

2. Literature Review

Entrepreneurship Education and Skills
Interest in entrepreneurship education is relatively new, yet emerging in Europe and also in Africa. When we look at applied education in terms of entrepreneurial education studies, which was pioneered by Shigeru Fiji, who began to teach the subject in 1938, at Kobe University in Japan, such efforts without a doubt started to gain momentum. After a full century entrepreneurship has started to gain the interest and popularity which is needed the most and is now universal. The greatest growth rates of the field can perhaps be noticed in the United States of America. It is important to reiterate that the greatest growth rates of the field were in the 1979, where the subject was offered at least at 25 institutions of higher learning.   A prominent scholar Karl Vesper found that in 1985 alone entrepreneurship was offered by 212 business schools and 41 faculties of engineering.   If we look at the United States of America alone in 1992, which was shortly after the Namibian independence there were approximately 500 learning establishments teaching entrepreneurship.   In Africa, interest in entrepreneurship is beginning to emerge as well. Dana (1990) noted that governments are realizing the importance of entrepreneurship has been a natural resource, and the cultivation is been viewed as of great national interest, and education has shifted to reflect this very important priority. A number of world-renowned business schools such as those in Australia, Malaysia, Singapore, and a number of nations in Africa have launched programs in entrepreneurship, specifically addressing issues as to how we can groom entrepreneurship for today and tomorrow and the mindset change required to do so. Prominent entrepreneurial initiatives can be seen in Kenya, although not necessarily based on business schools.

Institutions of higher learning in Namibia such as UNAM (University of Namibia), IUM (International University of Management) and NUST (Namibia University of Science and Technology) have introduced a number of courses in entrepreneurship and innovation as the current economic times are very tough and the country is forced to think more of job creators, rather than job takers. At UNAM there is only one module for 3rd years in the Faculty of Economics and Management Sciences, while the education faculty offers entrepreneurship for educators. It is very important to reiterate that there is a very great need for the way in which people have to be orientated in entrepreneurship as there is often a confusion or at times a very huge misunderstanding of what is required to be a successful entrepreneur. Verin (1982) notes that the concept of entrepreneurship was established in the 1700's, and its meaning has since evolved. During the 20th century, an eminent economist, Schumpeter focused his research on heat drives an entrepreneur to be innovative and develop the ability to create upheaval and change. His study had a very special yet unique term, called creative destruction and this became one of the greatest attributes that an entrepreneur must possess. Hoselitz (1960) perceives an entrepreneur as a person who buys a commodity at a certain price and sells at a price which is uncertain. On the opposite end Leibenstein (1968) opines that an entrepreneur is a person who owns all the necessary resources to produce and also launched on the market a product which responds to the deficiencies within the market. According to Kirzner (1985) an entrepreneur as a person who perceived the existence of profit opportunities and initiated some actions to complete the unsatisfactory current needs. It was Bygrave and Hofer (1991) who defined an entrepreneur as a person who perceives an opportunity and creates the organization to follow it.

Having looked at a few prominent writings on the definitions of entrepreneurship in the literature it becomes clearer that there is no widely accepted of the concept, and how best the concept can be measured is also still

remaining a challenge. To sum up the definition of entrepreneurship has a lot to do with personality, and this is a dimension which will need further exploration when it comes to entrepreneurial education in Namibia. A further exploration is needed in Namibia, as the concept in itself has to be contextualized. Furthermore, it is important to reiterate that when looking at entrepreneurial learning and training in networks that entrepreneurship was generally passed on from father to son. The various sectors of the economy were controlled by Guilds in terms of entry, and it usually took a longer period to be admitted to training. It was required of the individual to undertake an apprenticeship during which a particular trade was supposed to be learned. This type of training was usually associated with personal and commercial relationships and not necessarily associated with educational institutions. The Mesopotamian civilizations of Assyria and Babylon were in the ancient ages referred to as Guild type organizations. These were groups of craftsmen which formed associations to safeguard their personal interest, and to develop relationships. At the same time, they were also performing quality controls, by making sure that future members are well trained by recognized experts in the field. Dana (2001) argued that when one looks at the guild system of the occident carefully, it is becoming clearer that an apprentice in Western Europe was usually dependent on his master and subordinate to him and it was the expectation that he deters the master. Looking at the Middle East, the difference between the   various educational systems in Asia namely India, Indonesia, Malaysia, Philippines and Singapore regarded networks as a very important medium through which knowledge and skills were transferred from successful to budding entrepreneurs. It is also critical to mention at this point in time that an informal vocational education system – stemming from ethnic networks – provides mentors as well as on the job training.

According to Aldrich *et. al.* (1987) the accessibility of networks is very important and significant in predicting whether or not a new venture will be created. Networks indeed forms a central point to the training of entrepreneurs.   In entrepreneurial education individuals or those who learn are involved in formal and informal networks, as a result of restrictive practices that not all entrepreneurs can have access to one. For instance; if we look at the case in India some castes systems were initially excluded from entrepreneurship and all a results certain individuals did not have the training in business related activities, due to their standing/status in their communities. Thus, it will be crucial that vocational and educational training be formalized to a certain degree. Furthermore; Dana (2012) noted that people lose their entrepreneurial spirit and drive due to the education system. When looking at education in the entrepreneurship context it is critical to understand that tradition business schools emphasize cognitive understanding of the concepts which usually takes place through a pen and paper exercises, and their graduates usually only acquire conceptual managerial skills. However, we forget the fact that entrepreneurs are more action oriented than simply relying on concepts. With action orientation it becomes important that universities train people who are doers, creative innovators, and the formation of such people will require the development of entrepreneurial skills; as merely memorization concepts is not sufficient for effective learning.

Looking at the groundbreaking works of Adam Smith an entrepreneur must be able to pursue opportunities through innovative creation, which will contribute to the economy. It is important to reiterate that there have been countless attempts by the various establishments of learning, to create people with the qualities we desire that all entrepreneurs must possess. These qualities include: *(1) analytical decision making; (2) calculated risk taking; (3) creativity; (4) effective communication; (5) high achievement orientation; (6) independence; (7) initiative; (8) innovation; (9) work ethic; and (10) non-conformity.* The key question is that whether these qualities are indeed taught in an attempt to form entrepreneurs? There is an assumption that most business schools teach students to conform, which is a challenge in the long run, as conformity cannot encourage creativity, innovation and entrepreneurship. A study conducted by Fleming (1988) which looked at whether universities have contributed to the formation of entrepreneurs noted sixteen (16%) of the entrepreneurs who took part in the survey said that there were value contributions to the academia. Furthermore, potential entrepreneurs can be encouraged or discouraged by schools. Knight (1987) states that business school graduates become entrepreneurs in spite of what, the faculty in business schools teach them, rather than because of it.

Kao (1988) echoed that the reason why people lose the entrepreneurial drive stem from the fact that the traditional education system teaches to formalize before doing, while entrepreneurial training should be

action based. Small business courses offered to people are also obsessed with business plans, and this is evident from the fact that business school is for reading, writing and talk, with not focusing on how and when students must act when having a particular situation. In a study which was conducted by Ellis, Murray and Ho (1989) university graduates from McGill University were asked whether university training prepared them to be entrepreneurs. Twenty (20) graduates responded that the MBA course was very helpful, seventeen (17) indicated finance, while only fifteen (15) see the small business course useful. The current methods used to judge entrepreneurial education has been deemed to be inappropriate as the present pedagogical approaches may produce managers but in order to create the much needed entrepreneurs, entrepreneurial skills should be developed to the fullest to compete in the international marketplace. It should thus be the onus of educational institutions to encourage the formation and development of entrepreneurs through entrepreneurial learning, whereby the theory is blended with the practice on the ground. More important is the skill to apply knowledge and the awareness to learn as a continuous process, constantly identifying new opportunities. In ensuring that there is a greater probability of success upon graduation educators have to be constantly aware of the changing market needs and couple entrepreneurial skills with the ever-changing needs of the market environment.

Kolb's (1984) work on Experiential Learning Model illustrates the essence and the role experience plays in the entire learning process. It is his assertion that concrete experience leads to good observations and reflections which are valuable to the learning process. In turn these can be used to build abstract concepts and the implications thereof lead to new scenarios, enabling the learners to setting a more concrete ground for the basis of learning. Kolb (1984) identified four categories which clearly shows the aptitude different individuals have than others, at different subjects. These are the *converger,* which has the dominant trait being an abstract conceptualiser, and is usually someone who is not very emotional and prefer to deal with things rather than people. In the opposite end the *diverger* is imaginative and emotional and very interested to work with people. Experience and reflective observation are their core strengths. The *assimilator* is an individual who is very much focused on logic and precision. Finally, the *accommodator* is the most talented person at learning and is someone who engaged in active experimentation, take risk and do things according to the immediate curriculum circumstances. We will explore the Namibian perspective in terms of entrepreneurial education and skills in the next section.

The Namibian Perspective in terms of Entrepreneurial Education and Skills
Higher Education in the Republic of Namibia has undergone several changes since independence on 21 March 1990. These changes were necessitated by the change in government, as the country was initial part of the old South African education system. Prior to independence the country's education was designed to reinforce the Apartheid system rather than providing an effective human resource base to promote sustainopreneurship and economic development.   The Bantu Education which was fragmented along racial and ethnic lines was the order of the day. This was strongly enforced among black communities in South Africa. The unequal distribution of resources and the standard or quality of education offered had a large influence on the entire system.   The stakeholders in the Namibian context are trying the best they can, but there is room for significant improvement to derive the results that can take the Namibian education sector forward.

A unified structure for the administration of education was created after independence. The system was fragmented into eleven sections, and departments were allocated according to race or tribes. The medium of instruction was mostly in Afrikaans and it was replaced by English which also became the official language and also the main medium of instruction in schools and educational institutions. Eight years after independence a new learner cantered curriculum for Grades 1-12 was introduced. This was a major milestone for Namibia and received recognition beyond borders and also included the adoption of the International General Certificate of Secondary Education from Cambridge, with the first Grade 12 batch graduating in 1995. The National Institute for Educational Development (NIED) in Okahandja dealt with the development of the curriculum, research which pertains to education and the professional development of the schoolteachers.

The Constitution directed the government to provide free primary education and this has been introduced throughout the country to ensure that all learners who are 7 years and older are able to attend school. In addition, parents were not charge a school fees or for books of the learners. The onus is still upon the parents to pay for the school uniforms of the learners and also the accommodation in hostels especially those who came from very remote areas. As of 2016 school fees were also abolished for secondary school education. This brought about the school enrolment rate of about ninety-five (95) per cent for school age children attending school and the number of teachers had also a significant increase of thirty (30) percent since 1990. As far as the gender parity is concerned there was a significant improvement in student/learner enrolment. The ratio comparison of male to female learners across the education spectrum was as follows; from 2011-2012.

Table 1: Educational level between male and female

Level of Education	Female	Male
Primary Education	97	100
Secondary Education	113	100
Tertiary Education (UNAM, NUST and IUM)	131	100
Vocational Training Centres	58	100

It is also very critical to mention at this stage that eighteen (18%) of the national budget was allocated to education in 2016, which represented 6 to 7 percent of the country's total Gross Domestic Product (GDP). This in turn makes Namibia a country amongst three nations around the globe with the highest contribution towards GDP. Numerous initiatives are taking place in the country in terms of encouraging entrepreneurial education. In school's entrepreneurship was initiation part of business management as a subject and was not studied as a stand-alone discipline. Given today's numerous changes in the education space, today the country is forced to offer it as a stand-alone subject, with the aims that upon graduation the students meet the 21st century skills which are required to be very competent in the job market. The next section of this paper is charged to look at the methodology.

3. Methodology

Data was collected for this study by means of a questionnaire from individuals in the entrepreneurial education sector (both students and those working in sector). A total number of twenty five (25) respondents were selected randomly. As most of the respondents work within the education sphere, hence their ability to understand and answer the questions contained in the questionnaire is unquestionable. In addition to the questionnaire's interviews were also conducted with staff the institutions of higher learning and Namibia and 10 interviews were conducted. The interviews were conducted in English and various staff members in the business and economics faculties were asked about their teaching in the various programs. The various section of the questionnaire was divided into the following sections: Biographical Information, the importance of entrepreneurial education and the learning styles which are important for entrepreneurial education.

4. Results and Discussion

Figure 1: Age Groups of respondents
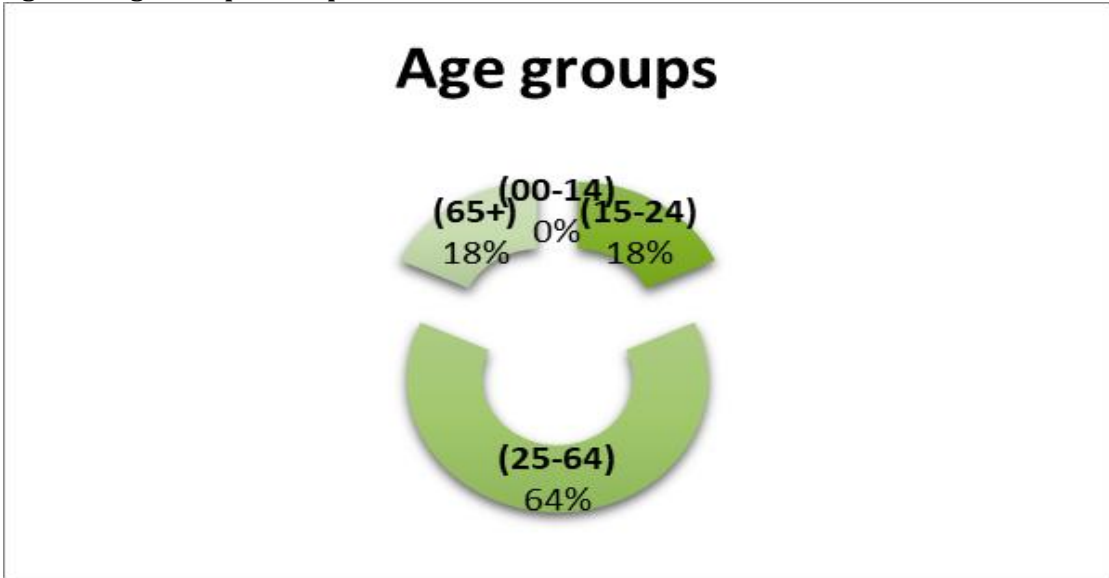
Eighteen percent (18%) of the respondents were between the ages of 15 – 24. Sixty four (64%) percent of the respondents were between the ages of 25 -64. The rest of the respondents who were above the age of 65 and above constituted 18%.

Figure 2: The importance of entrepreneurial education in Namibia
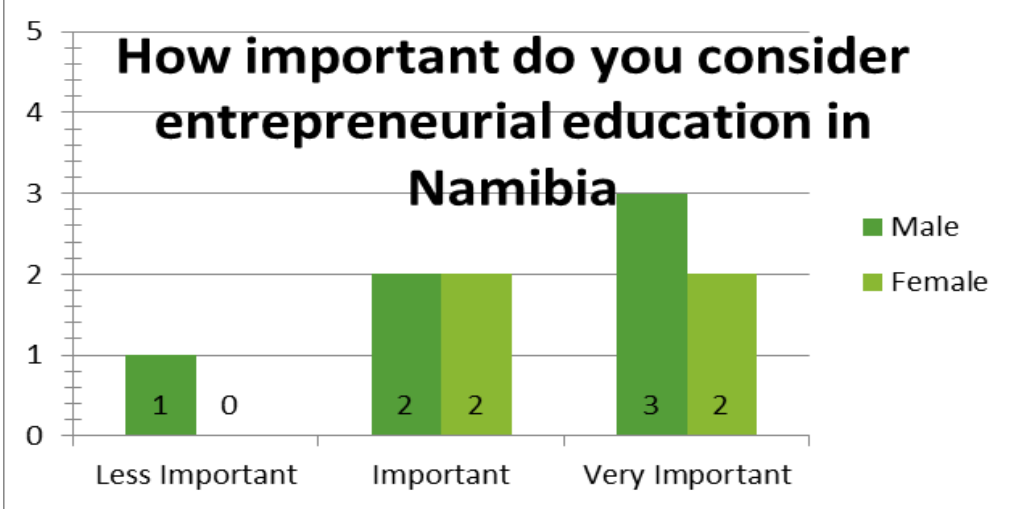
The majority of the respondents, who were seventy-three (73%) percent who filled out questionnaires for this study felt that entrepreneurial education in Namibia is very important. Another twenty percent (20%) of the respondents felt that it was just important, while remaining seven (7%) percent did not feel the need for its importance. This is a clear indication that there is a great need for entrepreneurial education and the manner within which we as a nation approach education and research has to change as it has bearing implications on how education is delivered to the students and learners

Figure 3: Responsibility to organize entrepreneurial education
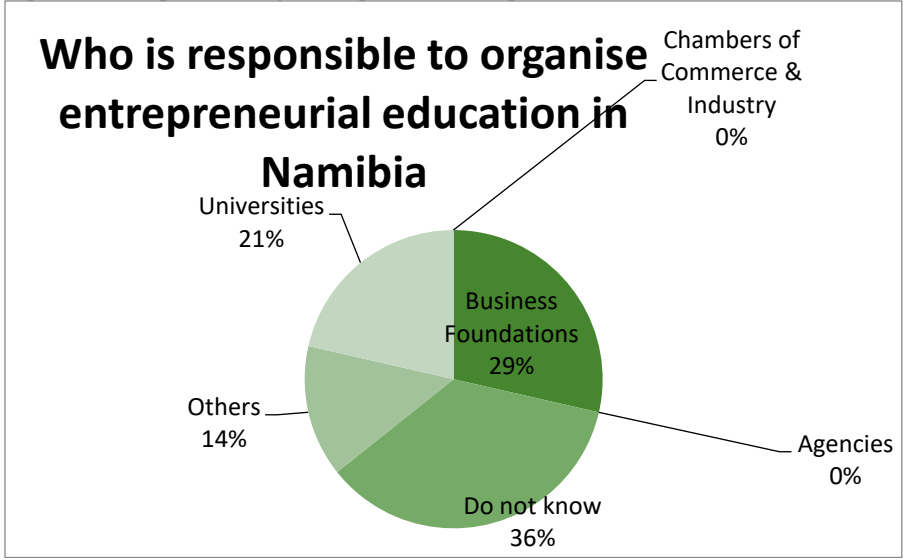
It was interesting to note from the results that most of the respondents were not aware who is responsible for entrepreneurial education in Namibia, while 29% of the respondents felt that the responsibility lies with the business foundations. It is noteworthy to mention that universities play at least twenty (21%) of the responsibility in providing entrepreneurial education. This result is a clear indication that there needs to be further mobilization on entrepreneurial education and training.

Figure 4: Entrepreneurial education and entrepreneurial mindsets
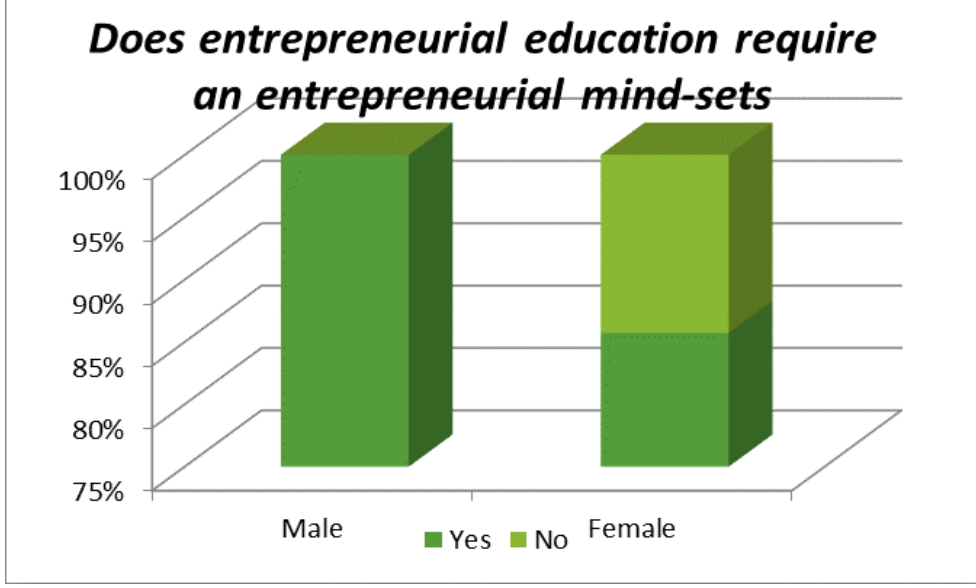
Most of the respondents felt that entrepreneurial education requires an entrepreneurial mindset, and very few of the respondents who were mostly female felt that you do not require an entrepreneurial mindset. Mindset change will require that Namibians be encouraged to tell their own stories and bringing it to life in the classroom. This will enable the students to emulate and grow then understanding and desire that if others has made it, they can too. Furthermore a change of mindset will also enable students in setting up enterprises who are deeply rooted in the local culture. For example; it is very interesting to note that in the neighbouring South Africa traditional knowledge systems in terms of medicine, has become a critical area

which people explore as an avenue to be integrated into the curriculum and also the idea of having traditional healers who can hand in hand with medical practitioners in public hospitals. Another critical component to this will be "Stokvel" where young people start to raise funds as collectives in the form of savings to support their communities.

Figure 5: Universities involvement in entrepreneurial education
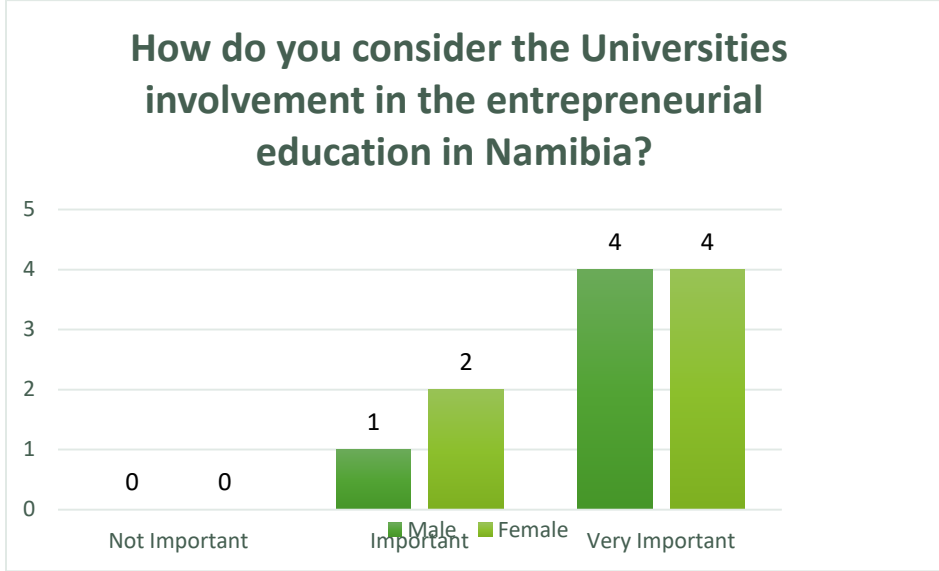
Sixty (60%) percent of the respondents were of the opinion that entrepreneurial education in universities is paramount to the success of the institution. Another twenty (20%) percent of the respondents felt that it was important, while the remaining twenty (20%) did not deemed it to be so important. This result is a clear indication that more needs to be done in institutions of higher learning and that a collaboration will be required between Technical training colleges and universities for effective impartation of knowledge and skills.

Figure 6: University specialized program in entrepreneurship
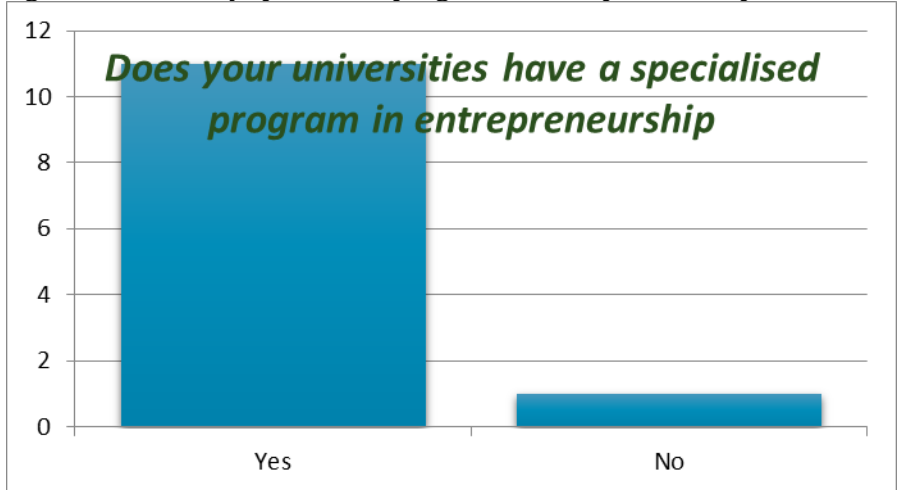
Eighty-seven (87 percent of the respondents) alluded to the fact that their institutions of higher learning have a specialized entrepreneurship program, while the remaining thirteen (13%) said they do not have. More than ninety (90%) percent of the respondents knew students in the various institutions of higher learning who intend to start their own business, and this to the researcher was a very positive thing. Another interesting point worth noting and mentioning was that most of the respondents felt that "Google" was the

best site to search for resources on entrepreneurial education. Pertaining to the issue of a business incubator the three universities for this study do not have a very formal incubator centre, however it is interesting to note that the Namibian Business School (also part of UNAM) has an incubation centre, which officially started this year. Over ninety (90%) percent of the respondents felt that the converger and the assimilator learning styles are the best for university education. The diverger and the accommodator were the least preferred styles of learning for entrepreneurial education.

With reference to the open-ended questions the respondents were of the opinion that some university educators always inform that there is no future in entrepreneurship in Namibia, as there is too much nepotism and corruption taking place. In respect of the extent to which culture influence entrepreneurship, most of the respondents felt that feeling from the side of the respondents holds or they can relate to it as their family members mostly want them to get a job, go to college and work for the government. There is no encouragement from the side of the family household to start something of your own.

5. Conclusion

It is evident from this assignment that entrepreneurial education is very important for the advancement of the Namibian economy. An extensive review of related literature was also explored in this paper, and it is evident that the definition of entrepreneurial orientation has to be contextualized and it is not a one size fits all. This paper also highlighted the role entrepreneurial education plays in business schools and that most of the skills students acquire in business schools are managerial skills and not technical skills per se. It is evident that Namibia has made significant effort to introduce entrepreneurship as a subject to be studied by learners in schools and universities, but the practicality of the subject and the extent to which it grooms and produce the required entrepreneurs remains a major challenge. The various learning theories were also explored in this paper. It is evident that Kolb's experiential learning model play a very pivotal role in entrepreneurial education.

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Paper 2

Relevant internal audit skills for the future: An evaluation of current curricula

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Abstract: Technological advancements are causing many changes in the business environment in which internal auditors provide their services. In this paper the internal audit skills necessary for internal auditors in this changing environment are investigated. A secondary research approach is followed by conducting a literature review as well as an evaluation of existing internal audit curricula. Possible changes due to technological advancements in the business and the internal audit work environment are considered, together with the impact of these changes on the higher education sector in South Africa. Internal audit skills necessary in this changing business environment include technical as well as pervasive skills. With regards to technical skills, internal auditors should be able to provide program assurance, understand strategic management, perform big data analytics, be IT literate and understand cyber security. The literature furthermore highlights the importance of internal auditors' soft skills including communication, negotiation, leadership skills and the ability to think critically. The model curriculum of the Institute of Internal Auditors (IIA) Global and the IIA SA were evaluated to identify gaps in the current curriculum based on the proposed skills needed by internal auditors. It was found that the current curriculum can be strengthened by including courses on integrated assurance, cyber security, strategic management, data analysis and statistics, and program assurance. Critical thinking and analytical abilities of internal auditors should be continuously developed throughout courses.

Keywords: Internal auditing, Internal auditing skills, internal audit curriculum

1. Introduction

The fourth industrial revolution or Industry 4.0 is constantly being promulgated as a reminder that we should change the way we think about business processes and even the viability of certain jobs (Butter-Adam, 2018). The impact of robotics, big data and other technological advancements can already be seen at multi-national corporates. The impact on the business environment globally but also in South Africa, have been considered in the literature to some extent (Xing and Marwala, 2017; Butter-Adam, 2018) . However, considerations of the impact on the higher education sector in general and specifically on the curriculum offered in a South African context, has been limited (Butter-Adam, 2018). Prior studies on internal audit curriculum and skills include: Barac *et al.* (2013) who previously evaluated the knowledge areas of the internal auditing curriculum of South African universities against the professional body requirements. Plant *et al.* (2013) have produced a range of articles on internal auditor competencies required at specific work levels (internal audit staff, management and chief audit executive levels) in South Africa. Fourie (2014) investigated the work-readiness of internal audit graduates. This was followed by Plant's (2015) thesis on competencies needed by internal auditors in the workplace and she proposed a workplace learning framework. However, the impact of more recent technological advancements on the required internal auditor skillset and a corresponding university curriculum have not yet been considered, specifically in a South African context.

A relevant curriculum, which addresses current and future skills needed by the profession therefore not only improves the relevancy of the qualification offered, but also improves a graduate's work readiness. Clune and Gramling (2012) as well as Fourie (2014) confirm this by highlighting the importance of graduates' ability to be productive in the workplace, shortly after appointment. Thus, a relevant curriculum should lead to graduates that understand and start contributing to their work environment, shortly after entering the workplace. With the recent and continuing changes to the business environment, due to technological

advancements, the question that this paper wants to address is, whether the current model university - and learnership curricula of the Institute of Internal Auditors (IIA) include components that will lead to a relevant skillset for future internal auditors.

The purpose of this paper is twofold, to investigate the impact of technological advancements on the skillset internal auditors will need in the near future. Concurrently, the current model curricula for education of internal auditors are evaluated against the skills types identified, to determine if the model curricula cover skills needed by internal auditors of the future. The university model curriculum of the Institute of Internal Auditors (IIA) Global and the IIA South Africa model curriculum for the Internal Audit Technician (IAT) and the Professional Internal Auditor (PIA) learnership programs are evaluated for this purpose.

2. Methodology

A secondary research approach was followed in this paper. Firstly, by conducting a literature review on relevant sources focusing on the changing business and educational environment and the resultant skills necessary for internal auditors. Secondly, by an evaluation of the current curricula prescribed for prospective internal auditors, through a document analysis. Literature from peer-reviewed journal articles as well as communiques and reports by professional bodies and other industry role players were consulted to gain an understanding of expected changes in the educational, business and professional environments. The findings from the literature were then compared to the IIA's model curriculum for universities as well as the IIA SA's learnership curricula. This comparison led to the identification of gaps in the current recommended curricula. Individual universities' curricula were not considered because universities in South Africa that offer internal audit qualifications need to align their curriculum to the IIA's curriculum in order to be accredited by the IIA (Fourie, 2014). Even if the universities don't obtain formal recognition from the IIA, graduates that want to obtain the IIA's professional qualifications after graduating from university, will need to have the skills as required in the curricula assessed in this paper (Clune and Gramling, 2012; Fourie, 2014; Plant, 2015).

The following types and number of sources were reviewed and cited in this paper:

Type of source	Number of sources cited
Journal articles	22
Professional body report	7
Professional article	6
Research report	5
Newspaper article	6
Curriculum document (IIA)	3
Thesis	2
Conference paper	1
Total	52

To establish curriculum context (Gilbert, 2006; Pilot & Bulte, 2006), this paper will consider relevant literature to understand what the environment of an internal auditor will possibly look like in the future. Thereafter, consideration will be given to prior research on possible changes within the higher education sector in the future. Finally, the literature on changes in the business environment and educational changes will be consolidated to identify critical skills and knowledge needed by internal auditors. The model curriculum of the IIA global, as well as the learnership curriculum of the IIA SA, will then be evaluated to identify if these curricula do include the necessary skills as identified from the literature. Finally, recommendations for improvement of the IIA curricula will be made.

3. Internal audit environment in the future

The World Economic Forum's 2015 Survey Report on Technology identified technology tipping points and their possible future impact on society. In this report, 80% of the transitional points, due to technological

advancements, are expected to realize by 2025 (Espinel, *et al*., 2015). Hence, it appears that by 2025 the context in which internal auditors work, will probably change.

The aforementioned report found, amongst others, that the internet of and for things, artificial intelligence (AI) and the use of big data will be prevalent. Ubiquitous computing and increased connectivity will increase people's digital presence. The sharing economy (sharing of assets), as well as blockchain technology, will disrupt the way business is being done in the future (Espinel *et al*., 2015). Many changes are therefore expected in the environment in which internal auditors work. Key themes related to expected changes in the environment, relevant to this paper, were identified from the literature and will be briefly discussed hereafter.

Globalisation/ connectedness: Companies cannot be evaluated on their own anymore; separation between suppliers, customers, staff and the organisation are not possible anymore, due to increased connectedness (Chambers & McDonald, 2013; D'Arcy, 2015; Diamandis, 2015). This connectedness is partly due to increased globalisation, and inter-connectivity through data sharing and the internet, which leads to an increase in cyber risk (D'Arcy, 2015). Even though these business trends can already be seen, globalisation and digital connectivity is expected to continue to increase, culminating in ubiquitous computing (Espinel *et al*., 2015).

Internet of Things: ISACA defines the Internet of Things (IoT) as: "Physical objects that have embedded network and computing elements and communicate with other objects over a network" (ISACA, 2015). IoT is a technological advancement that is already impacting business (Xing and Marwala, 2017). Although business opportunities lie within the use thereof, IoT also poses risks to organisations. Risk considerations include identity and access management, privacy of information as well as compliance risk (Weber & Weber, 2010). In organisations, IoT overlaps with the 'bring your own device' (BOYD) concept. BOYD refers to the fact that employees bring their own devices to a work environment which is necessarily connected to other devices or the internet (IoT). The organisation therefore doesn't have control over these devices which leave the organisation possibly vulnerable to cyber-attacks, viruses or leakage of sensitive information (Weber & Weber, 2010; ISACA, 2015). Expectations are that the IoT will be prevalent in the future and that most products will be connected and will be communicating through ubiquitous computing infrastructure (Espinel *et al*., 2015).

Big data and analytics: Amongst others, connectedness and the IoT are resulting in vast amounts of data being available, and that data will be everywhere and in everything (Diamandis, 2015). This is called big data, and big data analytics refers to the interpretation and gathering of intelligence and insights from the large amounts of unstructured and raw data available (Setty & Bakhshi, 2013). The importance of using big data as a competitive advantage can already be seen and the use thereof is expected to increase. The emphasis, are not necessarily on the vast amounts of data available, but on the interpretation and analysis thereof. Big data can also be used for predictive purposes (predictive analytics) (Protiviti, 2015).

Emerging technologies: virtual reality, augmented reality and artificial intelligence: Emerging technologies will continue to disrupt and provide different benefits and challenges to businesses of the future (Diamandis, 2015). Current emerging technologies include virtual reality and augmented reality (Xing and Marwala, 2017). Prosser (2016) argues that especially augmented reality will be used by business of the future, as augmented reality "overlay sensory information…… on the real world around you". He suggests for example that engineers will be able to use augmented technology to do maintenance inspections on aeroplanes. Training of staff could be much more effective and realistic through the use of augmented reality as a training tool, where the trainees will be able to interact with a real-life environment in order to learn new skills through computer assistance (Prosser, 2016). Even auditors' traditional evidence gathering through physical verification procedures, could possibly be done in future by the use of augmented reality ware.

Company funding and trading: Blockchain and Bitcoin: Blockchain is a distributed database upon which Bitcoin cryptocurrency is based. Bitcoin is "an anonymous peer-to-peer electronic cash system, which eliminates the need for a third party, financial institution to facilitate economic transactions" (Nakamoto, 2013). As the use of bitcoin and blockchain technologies get more and more acceptable (Grant & Hogan,

2015), auditors will need to start thinking about how Bitcoin transactions will affect future business and how Bitcoin transactions can/should be audited.

Today, virtual and augmented reality, is becoming a reality; and bitcoin and IoT is changing perceptions. However, new technologies will keep on emerging as we are living in a volatile and fast changing world (D'Arcy, 2015). Regardless of the emerging technologies and or social economic circumstances of the day, internal auditors will need to be on the forefront in understanding the risks posed, and should continue to find creative ways of assisting organizations to reach their objectives (Bou-Raad, 2000; D'Arcy, 2015; IIA Audit Executive Center, 2019).

4. Higher education in the future

Barber, *et al.* (2013) as well as Xing and Marwala (2017) expect that the higher education sector will change dramatically in the coming 50 years. This expected change will be stimulated by the increasing costs of higher education, growing globalization, internationalization of education (Altbach & Knight, 2007; Altbach, 2015), and changes to historical limitations to access to education, due to technological advancements (Dunn, 2000; Barber, *et al*, 2013). Glenn and D'Agostino (2008) suggest that, in the future, higher education will be individually paced, determined by individual student needs. Therefore, students will be assessed individually, and results will determine which course should be taken next by that individual in order to further develop their skill set and knowledge basis. Curricula will therefore not be a one size fits all, but will possibly be customisable (Dunn, 2000). This individualized approach will result from the extensive use of data and data analysis, as well as online and technological educational resources available. Individualized education offerings will possibly be supported by digital content delivery and custom publishing (Nelson, 2006), therefore it is possible that educational material will be provided in a digital format according to individual needs.

Technological developments, as well as global increased access to the internet over the past few years, led to the development of Massive Online Open Courses (MOOCs) (Yuan & Powell, 2013). MOOCs are open education courses and are freely accessible online. Yuan and Powell (2013) as well as Xing and Marwala (2017) suggest that MOOCs can possibly be seen as a disruptive innovation in education. The findings of Barber *et al.* (2013) corroborates this and further recommends that new technologies should be used by universities in order to create value for their students. MOOCs, as well as other online learning resources, will increasingly be used in order to establish individual student focused courses. Individualized courses will most likely lead to the creation of interdisciplinary courses, or courses which contain one or two subjects from "another discipline" (Glenn & D'Agostino, 2008). This phenomenon is especially relevant to future internal audit education. Recent trends dictate that internal auditors need to audit a much wider set of information, presented in various formats, other than traditional financial information (Fernandes, 1994; Bou-Raad, 2000; Soh & Martinov-Bennie, 2015).

Other current trends in higher education, that are expected to be more widely implemented, are technology based educational methods such as using online gaming and simulation software as a teaching tool, flipped class rooms, podcasting and screen casting videos as well as online assessments (Dunn, 2000; Glenn & D'Agostino, 2008; Xing and Marwala, 2017). Furthermore, the increase in corporate academic partnerships (Glenn & D'Agostino, 2008; Barber *et al*., 2013), can not only address some of the funding issues currently experienced by universities, but can also possibly lead to a more practitioner focused education due to corporate requirements. A practitioner focus to education could result in the use of more case studies and internships as "real life" educational tools, which were found to be greatly beneficial for specifically internal audit education (Greenawalt, 1991; Fernandes, 1994). Practical courses focused on skills, and not only knowledge, should therefore be the order of the day (Fernandes, 1994).

5. Internal audit skills needed in the future

Changes in the environment in which internal auditors operate, necessitates changes in the skillset needed by internal auditors (Chartered Instittue of Internal Auditors, 2018). This is not to say that all current skill

requirements will be deemed redundant, but rather that the focus of traditional internal audit skills needs to be sharpened and adapted to fit in a changing environment (Butter-Adam, 2018). This paper will focus on "new" or undeveloped skills needed by internal auditors, as a result of perceived changes in the business environment.

The move towards automation of previously manual accounting and business processes, and the possible use of robotics within the business environment, points to the possible redundancy of certain professions in the form that we currently know it (Hooper, 2015; Badenhorst, 2016; Zitting, 2016; Butter-Adam, 2018). Auditing also falls within this category and continuous auditing and integrated assurance will probably become more prevalent through the use of artificial intelligence and advanced automated data analytics (KPMG, 2007; Marks, 2009; Davenport, 2016; Chartered Instittue of Internal Auditors, 2018). The Institute of Internal Auditors (IIA) has recently found that due to changes in the business environment, internal auditors will need to focus on the following areas in the future: auditing of organizational culture, cybersecurity risks, evaluating quality of data and using data analytics (IIA Audit Executive Centre, 2016). Other critical skills deemed important for the future are: analytical/critical thinking, business acumen, industry-specific knowledge, IT, accounting, risk management assurance, data mining and analytics and cybersecurity (Bou-Raad, 2000; Hooper, 2015; IIA Audit Executive Centre, 2016; Butter-Adam, 2018). The following recurring themes were identified in the literature that describe skills that internal auditors will need in the future.

Programme assurance: For the past decade a strong emphasis on information technology (IT) and automation of business processes has been seen (Hooper, 2015). Therefore, IT audit specialists have become a necessity for most internal audit teams. Fernandes (1994) has identified IT auditing as a key skill for internal auditors of the future. Automation of business processes implicates implementation and big investments into IT systems (or IT projects). This requires internal auditors to have programme assurance skills as part of their service offering in order to support the organisation in reaching its objectives. Historically it has been found that internal auditors focus on IT risks and controls, but little work is done on assuring "IT development and acquisition" (Hermanson, *et al*, 2000). Emphasis on programme assurance as an internal audit offering will be sure to address this service gap in the organisation. The increase in reliance on IT and digitalisation of organisations will increase the need for this service by internal audit.

Big data analytics: Data analytics will form a critical part of the organisation of the future. In the future internal audit will not be able to perform their duties without skills to analyse and interpret big data (Dzuranin & Mălăescu, 2016; IIA Audit Executive Centre, 2016; Chartered Instittue of Internal Auditors, 2018). Zitting (2016) claimed that "the traditional auditor is obsolete", due to the lack of analytical skills, especially with regards to analyses of big data. Kim, *et al,* (2009) established that internal auditors accept the use of basic features of information technology; however internal auditors struggle to use more complex features such as digital analysis, especially the analysis of vast amount of data. These findings were corroborated in a more recent study by Dzuranin and Mălăescu (2016) and IIA Audit Executive Center (2019). There is therefore a perception that for many general internal auditors, being uncomfortable with data analytics is still the norm. Protiviti (2015) support this perception and suggest that big data analysis does not only imply analysis of historical data, but that internal auditors should also use big data for forward looking predictive analysis. Knowledge and understanding of statistics and interpretation thereof is, and will increasingly be, a critical skill for internal auditors (Fernandes, 1994).

Soft skills: Interpersonal (soft) skills are deemed to be a key quality needed by internal auditors of the future (Bou-Raad, 2000). Since many of the current internal audit activities will be automated in the future through the use of continuous auditing techniques and robotics (Hooper, 2015; Badenhorst, 2016; Deloitte, 2018), the need for internal auditors will hinge on their interpersonal as well as interpretation skills (Davenport, 2016). The IIA has found that communication is one of the top skills that are deemed to be important for the future of internal audit (IIA Audit Executive Centre, 2016). Communication skills not only entail report writing and verbal communication, but have evolved to include the ability to interpret and assess social media communication impact, assessing the organisational culture, as well as communicating and evaluating increased levels of data (big data) (Chambers & McDonald, 2013; Hooper, 2015; Davenport, 2016; Butter-Adam, 2018). Soft skills of importance to internal auditors also include negotiation skills, information

extractions skills and relationship building and leadership skills, amongst others (Fernandes, 1994; Hickman, 2012; Chambers & McDonald, 2013; D'Arcy, 2015).

Critical thinking and continuous learning: Critical thinking and continuous learning have been identified as key skill requirements for Chief Audit Executives (CAE) (Greenawalt, 1997; Bou-Raad, 2000; Chambers & McDonald, 2013; D'Arcy, 2015; IIA Audit Executive Centre, 2016). Critical thinking and adaptability are especially important in the rapidly changing business environment we are, and will be living in (Xing and Marwala, 2017). The ability to think critically and the willingness to learn and develop new skills will be (and is) critical to the relevance of internal auditors (Deloitte, 2018; Greenawalt, 1997). New technologies, for example augmented and virtual reality, AI and robotics will press internal auditors to approach audits in different and creative manners (Hooper, 2015; Badenhorst, 2016; Dzuranin & Mălăescu, 2016; Prosser, 2016; Deloitte, 2018). For example, assurance on the work of a robot; assessing effectiveness of controls over Bitcoin investments; or interviews through augmented reality (Dzuranin & Mălăescu, 2016) will surely require an alternative audit methodology/approach and out of the box thinking (Deloitte, 2018).

Strategic: One way in order to ensure the future relevance of internal audit, is for internal auditors to have a good understanding of the organisation's strategy, with the ability to evaluate whether risks and controls are aligned to the strategy of the organisation (Fernandes, 1994; Protiviti, 2016; Chartered Institue of Internal Auditors, 2018). In an automated and digital environment, relevance of internal audit will be found in the insight and contribution that can be made in assisting the organisation in reaching its strategic objectives (D'Arcy, 2015; IIA Audit Executive Centre, 2016; Zitting, 2016). Internal auditors of the future's skill set will need to include not only the ability to audit quantitative financial related matters, but also qualitative information, which include assurance on strategy and strategic management as well as assessments of organisational culture (IIA Audit Executive Centre, 2016; IIA Audit Executive Center, 2019).

IT literacy/coding: Hooper (2015) emphasised the importance of auditors of the future to be at least IT literate. IT literacy of the past referred to understanding and knowledge of information systems and technologies, however IT literacy of the future will include the ability to code (Popescu, 2013). Vee (2013) argues that coding is not just a skill, but literacy itself and future generations will deem this as a key literacy. All computing is based on coding, and in an environment of ubiquitous computing, the skill to write, assess and recognise code, will be essential for many if not all professions (Popescu, 2013; Butter-Adam, 2018). Dzuranin and Mălăescu (2016) pointed out that a major concern for IT auditors is the quality and sources of data, especially in a big data environment. In order to assess quality of data and analytics, at least basic coding skills and knowledge will be deemed a necessity for all internal auditors. For internal auditors, as professionals and assurance providers, understanding of coding (and assessment of the validity thereof) will most likely become a necessity and not just an area of specialisation.

Cybersecurity: The IoT, increased connectedness, reliance on big data as well as all of the aforementioned emerging technologies have one commonality, reliance on the internet and information technology systems. Increased use and reliance on the internet poses increased cyber risk (Dzuranin & Mălăescu, 2016). In order to address cyber and IT risks, organisations need strong IT governance structures, IT risk management and IT frameworks and policies. A lack of cybersecurity skills and knowledge is currently preventing internal audit to be effective in assessing cybersecurity and IT related risks, therefore expertise in this area is needed, not just by IT auditors, but especially by "general" internal auditors (IIA Audit Executive Centre, 2016; Protiviti, 2016; IIA Audit Executive Center, 2019).

Curriculum for internal auditors: The review of the literature to gain an understanding of expected changes in the business environment, educational environment and subsequent internal audit skills needed, led to the identification of curriculum components important for future internal auditors. In this section the current curricula of the IIA are evaluated against the findings from the literature.

The IIA's current model curriculum: The previous sections considered the changes in the business environment due to technological advancements and the corresponding skillset necessary to work in this changing environment. The question that now arises is whether the current IIA curriculum makes provision

for development of the skills identified in the literature and discussed in the previous section. The IIA's Global Model Internal Audit Curriculum (IIA curriculum) (IIA, 2012) was reviewed to identify possible gaps in the current curriculum. In order to provide a South African perspective, the IIA SA's curriculum for the PIA and IAT learnership programs were also reviewed.

The current IIA curriculum (global) requires the completion of the following courses at either a core or supplemental skill level:

Table 1: IIA's Global Model IA Curriculum courses (Source: IIA's Global Model Internal Audit Curriculum)

Course Title	Core (C) / Supplemental (S)
Principles of Internal Auditing	C
Ethics and Organizational Governance	C
Fraud and Forensics	C
Information Technology (IT) Auditing	C
Business Communication Skills for Internal Auditors	C
Internship and/or Case Studies/Internal Audit Projects	C
Advanced Internal Auditing	S
Developing and Managing an Internal Audit Function	S
Risk Management	S
Advanced Organizational Governance	S
Advanced IT Systems and Auditing	S
Internal Auditing Topics	S

The IIA SA's curriculum for the IAT and PIA learnership courses includes the following broad categories of skill requirements:

Table 2: IIA SA's IAT and PIA Curriculum (Source: IIA SA IAT and PIA curriculum, n.d.)

Module Title	
Internal Audit Technician	**Professional Internal Auditor**
Introduction: Building Foundations	Internal Audit's role in Governance
Aspects of Fraud	Internal Audit's role in risk management and control
The Internal Auditor and Information Technology	Managing the internal audit activity
Business Communication	Advanced Interpersonal skills and communicating results
Governance, risk management and control	Specific Internal Audit engagements
The Internal Audit Process	
Business Processes	

Module Title	
Internal Audit Technician	Professional Internal Auditor
Aspects of Financial Management	

Key curriculum components needed in the changing environment

In this section the findings from the literature are matched and summarized to formulate key curriculum components. Table 3 presents the changes in the business environment and the resulting internal audit skills needed to function in this changing environment (column 1 and 2). After the identification of internal audit (IA) skills needed, as per the literature review, key curriculum components were formulated.

Table 3: Proposed Key Curriculum Components

Change in environment	IA Skill needed	Key Curriculum Component
Globalisation and connectedness (ubiquitous computing) Internet of things Automation of internal auditing through AI and robotics Big data and data analytics Bitcoin and blockchain technology Volatile fast changing environment Investment in large scale IT projects and infrastructure	Strategic management skills and the auditing thereof Cybersecurity knowledge and insight Coding skills and IT literacy Understanding of IT Governance and IT Frameworks Critical thinking and continuous learning Ability to interpret and provide insight on data and audit exceptions Statistical analysis and interpretation Soft skills and communication Project management and programme assurance	Strategic management Integrated assurance techniques (auditing of various types of information and sources) Cybersecurity risk management, controls and fraud IT literacy and coding IT Governance and Frameworks Critical thinking and analytical abilities Data analysis and interpretation Advanced statistics Soft skills and communication Project management and programme assurance

Evaluation of current IIA curriculum

An evaluation of the detailed content recommendations of each of the courses in the IIA Global curriculum and the IIA SA learnership programs' curriculum were performed in order to determine if each proposed key curriculum component (as per Table 3) was included in the current IIA curriculum or not. The results are provided in Table 4.

Table 4: Key Curriculum Components matched to Current IIA Curriculum

Key Curriculum Component (Table 3)	Matched to current IIA Global and/or IIA SA curriculum?	IIA Global Curriculum course title matched to.	IIA Global Curriculum Course detailed topic matched to.	IIA SA Curriculum course title matched to.	IIA SA Curriculum Course detailed topic matched to.
Strategic management	No	N/a	N/a	N/a	N/a
Integrated assurance techniques (different methods to audit different kinds of data)	IIA SA: limited, only combined assurance	N/a	N/a	PIA: Internal Audit's role in Governance	Combined assurance (King III)
Cybersecurity risk management, controls and fraud	IIA Global (assuming that cybersecurity = information security)	IT Auditing	Information security processes to prevent unauthorized access to programs and data (accessibility, confidentiality and integrity of data)	N/a	N/a
IT literacy	IIA Global IIA SA	IT Auditing and Advanced IT systems and Auditing	All of the topics included in these two courses will lead to general IT literacy.	IAT: The Internal Auditor and Information Technology	Latest development in the ICT environment e.g. Cloud computing, BYOD, Big Data, Social Media and other developments
Coding	No	N/a	N/a	N/a	N/a
IT Governance and Frameworks	IIA Global (only limited) IIA SA	Advanced IT systems and Auditing	COBIT Framework	IAT: The Internal Auditor and Information Technology	Basic ICT governance & control frameworks, KING III Recommended Practice and common terminology a. COSO Framework b. COBIT 4 and 5 Frameworks

Key Curriculum Component (Table 3)	Matched to current IIA Global and/or IIA SA curriculum?	IIA Global Curriculum course title matched to.	IIA Global Curriculum Course detailed topic matched to.	IIA SA Curriculum course title matched to.	IIA SA Curriculum Course detailed topic matched to.
					(ISACA) c. ITIL d. ValIT
Critical thinking and analytical abilities	No – not specifically mentioned	N/a	N/a	N/a	N/a
Data analysis and interpretation	IIA Global – limited IIA SA- No	IT Auditing	Analyzing the unique risks of information technology and related data	N/a	N/a
Advanced statistics	No	N/a	N/a	N/a	N/a
Soft skills and communication	IIA Global: limited with focus on communication IIA SA - Yes	Developing and Managing an Internal Audit Function; and Business Communication Skills for Internal Auditors	People management; and all the content of the Business Communication course.	IAT: Introduction – Building the foundations; and Business Communication PIA: Advanced Interpersonal Skills and Communicating Results	IAT: Business etiquette and all content of Business Communication PIA: All content of Advanced Interpersonal Skills and Communicating Results
Project management and programme assurance	No	N/a	N/a	N/a	N/a

From the information gathered, in order to prepare internal auditors for the future it is advised that the IIA Global model curriculum as well as the IIA SA's IAT and PIA curriculum (marked with *) be updated and amended to include and/or elaborate on the following courses/topics:

Strategic Management* – Basic strategic management practices and processes.
Integrated assurance techniques (and combined assurance frameworks) - Audit methodologies in order to audit a variety of quantitative and qualitative information. The role of internal audit as combined assurance champion.
Cybersecurity* – Understanding the cybersecurity and risk management environment and how to perform audits in an environment where cybersecurity and cyber risk is prevalent.
Coding* – Basic coding skills and language, to be able to perform advanced data analytics, as well as at least basic understanding of code and assurance thereof.
IT Governance – In depth knowledge of different IT governance frameworks and IT structures needed within the organization.

Critical thinking and analytical capabilities* – These outcomes should be built into requirements of all other courses offered to internal auditors, in order to promote advanced thinking.
Data analysis and interpretation and advanced statistics* – Analysis and interpretation of large amounts of data, this course will need to include advanced statistical methods.
Soft skills – Communication through emerging technological and social media channels and the audit thereof. Information extraction skills, negotiation skills as well as relationship building skills.
Project management and program assurance*–Basic project management methodology (Prince2/PMBOK). Program assurance methodology and assessment of a project.

Not only changes to the curriculum content need to be considered, but also the educational methods to deliver this content. Therefore, not just the 'what' but also the 'how', will be important in the future (Xing and Marwala, 2017). The literature reviewed has pointed out that drastic changes to the higher education sector are expected (Dunn, 2000; Altbach, Reisberg & Rumbley, 2009; Barber *et al*., 2013). Hence, internal audit educators should be prepared, and on the forefront of these changes. Prior studies have proven the importance and impact of case studies and practical experiences through internships, for internal audit education (Greenawalt, 1991; Fernandes, 1994). With the advancement of new technologies, case studies and practical experience could be simulated through the use of virtual and/or augmented reality technology. Practical technology-based assessments and the resulting analysis of individual student data in order to provide a more customisable curriculum and course offering should be considered. These changes in education, can be exploited if consideration is given to changes in education methods and philosophies, in order strengthen the quality of internal audit education.

The proposed amendments to the curriculum, recommended in this paper are not comprehensive, but rather emphasize skills and areas were the current curriculum is lacking because of identified expected changes in the environment. Therefore, this paper was limited to identifying gaps in the current curriculum pertaining to the changing business environment and was not a comprehensive evaluation of the full curriculum and skills necessary to be a successful auditor. A further limitation of the paper is that findings are based only on the literature and a basic document analysis.

6. Conclusion

In order to formulate a curriculum for relevant internal auditors of the future, possible changes to the internal audit environment were considered. It was found that increased globalization and connectedness will lead to ubiquitous computing. The IoT, big data, artificial intelligence and robotics will likely influence business operations of the future. Big data and Bitcoin pose advantages to organizations, but also brings increased cyber and other risks. It was further found that higher education, in future, will be much more customisable and individualistic, and the increased use of technologies as teaching and assessment tools will be commonplace.

Internal audit skills necessary for being relevant in the future, includes understanding of program assurance, big data and data analytics, soft skills, critical thinking and continuous learning, strategic management, IT literacy and coding and knowledge of cybersecurity and risks. These required skills led to the identification of gaps in the current IIA model curricula. Key curriculum components recommended to be included in the IIA curriculum are strategic management, integrated assurance techniques, coding, IT governance, critical thinking, data analysis and statistics, soft skills, and project management and program assurance. It is recommended that the IIA curriculum, globally but specifically for South Africa, be updated with the key curriculum components identified in this paper. This will ensure that the curriculum is relevant in order to prepare internal auditors for Industry 4.0.

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Paper 3

A balancing act: Stakeholder enablement and empowerment towards multiple stakeholder engagement

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Abstract: The increasing pluralistic business environment, where stakeholders continually challenge the treatise of organisational primacy, places more pressure on organisations to address and prioritise diverse stakeholder expectations. Stakeholders are central to the success of organisations, which necessitates engagement, transparency and responses to stakeholder concerns. Despite consensus in existing literature on the significance of stakeholder engagement, no common understanding on what it entails exists. Another gap is to approach stakeholder engagement from multiple stakeholder vantage points and to explore the role of the strategic communication professional in facilitating stakeholder engagement. The digital network revolution, among others, has brought about a "collaborative turn" that allows innovative and engaging opportunities to obtain valuable information from stakeholders through interactive conversations. These forces resulted in a paradigmatic shift in strategic communication where emergent processes and the rejection of linearity become prevalent. The role of the strategic communication professional is to facilitate a stakeholder engagement strategy that elicits dialogue, consultation and reciprocal relationships that are evolutionary and mutually defined. Based on this contextualisation, this paper proposes a theoretical, conceptual framework for multiple stakeholder engagement by drawing from the principles of polyphonic strategic communication. Depending on the controllability of voices, a polyphonic communication perspective for multiple stakeholder engagement allows interplay between a centralised strategic communication approach through stakeholder enablement and a more decentralised communication approach to elicit stakeholder empowerment. This paper serves as foundation for further empirical validation of the proposed multiple stakeholder engagement framework and emergent, multi-voiced approaches in strategic communication.

Keywords: Stakeholder engagement; polyphony; polyphonic communication; strategic communication

1. Introduction

The current business environment is increasingly sensitive to power relations and necessitates organizations to acknowledge the meaning and value that could be derived from diverse stakeholder perspectives (Johnston, 2014). This, as cited by Johnston (2014), requires an awareness of "privileging certain groups and the marginalization of others, but highlights the relational, and therefore moral, nature of our social and organizational experiences" (Cunliffe, 2009). This places renewed emphasis on the importance of stakeholder engagement as a means to co-create meaning and solutions. It also provides the opportunity to realize the role of the strategic communication professional as facilitator of a stakeholder engagement process that elicits dialogue, consultation and reciprocal relationships that are evolutionary and mutually defined (Cornelissen, 2014).

To embrace the interactive network society, contemporary research in strategic communication has sparked interest in emergent strategy as opposed to deliberate, planned strategy formulation. From this perspective, organizational management "abandons the prerogative of intentions over strategy formulation and flattens the way for a collective learning process" (Zerfass & Schneider, 2018). Emergent strategies arise from decentralized interactions and develops incidentally in a ritualistic rather than linear fashion. Research in this milieu include, among others, Zerfass and Schneider's (2018) proposition of polyphony in strategic communication as a multi-voiced communication strategy that requires a mindset of openness and an

appreciation of diverse voices. Essentially, it is argued that strategic communication professionals should step down from managing the organization's communication by allowing other actors to speak on behalf of the organization.

Stakeholder engagement is regarded as an "under-theorized area" (Greenwood, 2007; Sloan, 2009), specifically within the field of public relations and communication (Dhanesh, 2017; Jelen-Sanchez, 2017). Rhodes, Bergstrom, Lok and Cheng (2014) concede that the best approach to engage with diverse stakeholders "is still inconclusive". In congruence, Dhanesh (2017) explicitly states that "the field [public relations] lacks a practice-relevant, theoretically informed model and definition of engagement that can inform practice and chart future directions of research". To address the need to expand the body of knowledge on stakeholder engagement, the purpose of this paper is to provide a theoretical framework for an approach to multiple stakeholder engagement with a specific emphasis on the role that the strategic communication professional could play in this process. This will be done by drawing from the principles of polyphonic strategic communication (Zerfass & Schneider, 2018). Such an approach, which departs significantly from normative theory (the excellence theory) and functionalist approaches in strategic communication, is essential to expedite the uptake of emergent and critical approaches in the field. The proposition of such a framework thus aims to contribute to the body of knowledge on stakeholder engagement and provides a starting point for further empirical validation for multi-voiced, emergent approaches in strategic communication.

The paper will be structured as follows: An elaboration on strategic versus secondary stakeholders will be provided followed by a discussion of engagement within an organizational context, as outlined in public relations, communication management and business management literature. This discussion will specifically focus on the various perspectives on engagement, an overview of existing stakeholder engagement frameworks and engagement complexities to culminate in various engagement considerations for an approach to multiple stakeholder engagement. An elaboration of the role of the strategic communication professional in stakeholder engagement will be provided followed by a discussion on polyphonic communication as a framework for multiple stakeholder engagement. This paper will be concluded with an acknowledgement of the contributions and limitations of this paper as well as directions for future research.

2. Strategic Vs Secondary Stakeholders

Since this paper aims to propose an approach for multiple stakeholder engagement, it is essential to define the concept "stakeholder" and to differentiate between strategic and secondary stakeholders. This elaboration will be of a generic nature, as the proposed approach will not be customized to a specific organization or industry. The word "stakeholder" was first utilized in 1963, in management literature at the Stanford Research Institute to generalize the concept of "stockholder" as the only group to which the organization should react (Freeman, *et al*, 2010). This gave rise to the definition of stakeholders as groups that are essential for organizational survival. Based on this notion, Edward Freeman (1984) developed the stakeholder concept as a mutually influential approach to strategic management, in which he broadly defined a stakeholder as "any group or individual who can affect or is affected by the achievement of an organization's objectives". The stakeholder concept concentrates on the maximization of value for all parties who are aligned with the organization's strategy, to ensure the fulfilment of mutually beneficial objectives (Freeman *et al.*, 2010). Organizations have a reciprocal relationship of influence and impact with specific stakeholders (AA1000AP, 2018). To accept accountability for stakeholders on whom an organization has an impact, does not imply that an organization has to adhere to all stakeholder requests or that it is relieved from making its own decisions (AA1000APS, 2018).

A starting point for a multiple stakeholder engagement approach is therefore to align stakeholder engagement with the broader stakeholder identification strategy of the organization (Slabbert, 2018), which should in essence provide a differentiation between strategic and secondary stakeholders. Secondary stakeholders are not deemed essential to the survival of the organisation (O'Higgins & Morgan, 2006), while strategic stakeholders are "those groups that may limit the autonomy of the organisation in pursuing and realising its strategic goals" (Freeman *et al.*, 2010). Slabbert (2012) asserts that strategic stakeholders ensure

the achievement of organisational objectives as well as the future existence and survival of the organisation and will always be present and relevant over time. Gao and Zang (2006) aver that sustainable development in the organisation can only be achieved through a multi-stakeholder approach. From this perspective, for the purpose of this paper, multiple-stakeholder engagement encapsulates short-term engagement with secondary and continuous engagement with strategic stakeholders, depending on the identified issue that holds mutual saliency and the controllability of voices. It is posited that an organisation should continually engage with strategic stakeholders towards sustainable relationship building and engage reactively with secondary stakeholders based on a healthy working relationship (Slabbert, 2018).

3. Engagement within an Organisational Context

The following discussion will provide an overview of engagement in an organisational context evident in public relations, communication management and business management literature. Although this paper aims to propose an approach to multiple stakeholder engagement in line with contemporary developments in strategic communication, it is noteworthy to consider that an organisation must select a mode of engagement that corresponds with their stakeholders' needs (Dhanesh, 2017).

Engagement perspectives: Despite the increasing importance of engagement brought about by digital media, the concept of engagement remains vague and is often used synonymously (and inaccurately) with interaction, commitment, involvement, dialogue and participation (Jelen-Sanchez, 2017). In this vein, Verčič and Vokić (2017) assert that engagement in public relations literature is used as an umbrella term to encapsulate the organisation's wide array of endeavours to involve stakeholders in its activities. Engagement in public relations, communication management and business management has predominantly been studied under the following themes: digital engagement (Smith & Taylor, 2017; 2016; Bowen, 2013); employee engagement (Ewing, Men & O'Neil, 2019; Sievert & Scholtz, 2017; Verčič & Vokić, 2017); corporate social responsibility (CSR) (Devin & Lane, 2014); corporate governance, sustainability and integrated reporting (Martinez, Peattie & Vazquez-Brust, 2019; Romero, Ruiz & Fernandez-Feijoo, 2018; Fasan & Mio, 2016; Manetti & Bellucci, 2016; Rhodes, *et al.*, 2014; Mathur, Price & Austin, 2008); corporate reputation (Rensburg & De Beer, 2011) and public/stakeholder engagement (Jelen-Sanchez, 2017; Dhanesh, 2017; Taylor & Kent, 2014; Johnston, 2014; Greenwood, 2007). Across these thematic engagement studies, specific engagement perspectives emerged which will be outlined in the sections to follow.

Engagement associated with and/or situated within dialogue: Dialogue is an ethical process of communication that allows creation of meaning, understanding, co-creation of reality and considerate and compassionate interactions (Taylor & Kent, 2014). Dhanesh (2017) notes that most engagement studies associated with dialogue attempts to conceptualise the notion of stakeholder engagement with actions such as "consultation, listening, involvement, openness, and most, importantly, dialogue". From this perspective, stakeholder engagement is considered a "network-based, relational and process-orientated approach" and is a "trust-based collaboration between individuals and/or social institutions with different objectives that can be achieved together" (Kaur & Lodhia, 2014). More specifically, stakeholder engagement represents the organisation's endeavours to involve organisational stakeholders in decision-making, to encourage participation in organisational activities and to recognise the potential influence the actions of one might have on the other (Magee, 2012; Noland & Phillips, 2010). Situating stakeholder engagement within dialogue enables organisations and stakeholders to make decisions and create social capital (Taylor & Kent, 2014). They further argue that engagement is an orientation that both influences and guides interaction among stakeholders.

Motion, *et al.* (2012) argue that engagement actually extends beyond dialogue as it entails stakeholder involvement in agenda setting, decision-making and policy formation. Further critique in associating stakeholder engagement with dialogue resides within the use of two-way symmetrical communication, which in itself has been highly criticised. It is argued that power asymmetries between an organisation and its stakeholders cannot be avoided; organisations might be unable to create the conditions of equality that dialogue necessitates. It might even be unrealistic for organisations to try and reach these conditions as they might have to relinquish organisational objectives imperative for survival (Dhanesh, 2017).

It is essential to note that dialogic communicators also have individual and/or organisational objectives to reach but the aim to achieve an understanding and to explore new possibilities obtain precedence over these objectives (Taylor & Kent, 2014). Taylor and Kent (2014) further state that the dialogic communicator will enter an interaction with their own framework of beliefs, values and attitudes to act in the best interest of their organisation and stakeholders, but should be willing to be changed by the encounter. This perspective corresponds with the concept of 'inclusivity" as a core accountability principle of the AA1000 Accountability Principle Standards (AA1000APS) and one of the four philosophical underpinnings of the King IV report on Corporate Governance. Inclusivity is regarded as an enabler of stakeholder engagement and encapsulates a "commitment to be accountable to those stakeholders on whom the organisation has an influence and to facilitate their participation in identifying issues and collaboratively working towards solutions" (Slabbert, 2018).

Engagement as control: According to Mathur *et al.* (2008), stakeholder engagement as a control or management endeavour represents a practical approach aimed at identifying stakeholders who could assist the organisation in achieving its objectives. This is in line with Greenwood's (2007) managerial control and social construction perspective and Sloan's (2009) controlling approach, where stakeholder engagement is conducted in line with the organisation's one-sided objectives (i.e., stakeholders need to be managed, evaluated and monitored). Engagement as control is associated with asymmetrical or two-way asymmetrical communication practices where the message creator controls the channel and content of information (Taylor & Kent, 2014). Where the focus of dialogical communication lies within generating an understanding through conversation, engagement as control is only applied as a means to more effectively execute the organisation's objectives.

Engagement associated with ethics: This approach to stakeholder engagement, rooted in participatory governance, equity, transparency and ethics, regards stakeholders as citizens with the right to value the process of participation for democratic reasons (Mathur *et al.,* 2008). Dialogic engagement also falls within this perspective, as dialogue is considered one of the most ethical forms of communication because it contributes towards alleviating power relationships, it values individual dignity and aims to involve participants in conversation and decision-making (Taylor & Kent, 2014). Noland and Phillips (2010) state that ethical stakeholder engagement encapsulates a notion of "seeing stakeholders as individuals with names and faces" (p. 41). Due to the interconnected relationship between stakeholders and the organisation, they argue that stakeholders should be engaged before the strategy of the organisation is even compiled. Similar to dialogical engagement, ethical engagement also accepts that the organisation's objectives are subordinate to their stakeholders' objectives and the environment in which it operates (Noland & Phillips, 2010).

Engagement associated with organisational behaviour and elements of psychology: Devin and Lane (2014) define engagement as a "dynamic motivated affective state that brings voluntary extra-role behaviours, and is characterized by affective commitment, positive affectivity and empowerment that an individual public experience in interactions with the organization over time". In the context of employee engagement, engagement is regarded as an agile and vigorous psychological state that serves as a connection between the organisation and employees (Welch, 2011). Verčič and Vokić (2017) argue that most definitions of engagement resonates with Kahn's (1990) work in defining employee engagement as a process where employees express themselves physically, cognitively and emotionally in enacting their roles in the organisation. In this vein, engagement implies a psychological and physical presence.

Overview of stakeholder engagement frameworks: Despite the equivocal nature of stakeholder engagement, various frameworks exist that provide specific stakeholder engagement criteria and/or standards. In business management literature, this include, among others, Arnstein's (1969) ladder of citizen participation; The Environment Council's (TEC's) stakeholder evaluation and benchmark criterion; the Global Reporting Initiative (GRI, 2015) and the AA1000 Stakeholder Engagement Standard (AA1000SES, 2015). In public relations and communication management literature, Devin and Lane's (2014) framework for CSR engagement and Dhanesh's (2017) model of engagement in public relations are seemingly the most prominent. For the purpose of this paper, the AA1000SES and the model of engagement in public relations (Dhanesh, 2017) will be used as benchmark to build towards a multiple stakeholder engagement framework.

AA1000SES

- The AA1000SES, developed by Accountability (a leading global research, consulting and standards organization) is an in-depth approach providing guidelines on the purpose, scope and process of stakeholder engagement. This framework consists of three sections that serve as foundation, preparation and implementation of stakeholder engagement (Slabbert, 2018; AA1000APS, 2018; AA1000SES, 2015

- *Commitment and integration:* To ensure that stakeholder engagement is aligned with the culture and organizational functions, adherence to the principles of the AA1000APS (2018), namely inclusivity, materiality, responsiveness and impact should be in place: An inclusive organization accepts accountability to those on which it has an impact and those who have an impact on the organization. It allows the organization to enable stakeholders' participation in identifying relevant material issues and solutions. Material issues are identified by means of a materiality determination process which also involves the prioritization of material issues that occur simultaneously. Responsiveness encapsulates the process of relevant reaction to material issues and measuring its impact on the economy, environment, society, stakeholders and the organization.

- *Purpose scope and stakeholders:* This section of the framework focuses on identifying the purpose (why), the stakeholders involved in the engagement (who) and scope (what and how) of the specific stakeholder engagement endeavour (Slabbert, 2018). It should be noted that the engagement process will be driven by the availability of engagement resources. These engagement resources will also determine the methods of engagement.

- *Stakeholder engagement process:* The actual engagement has to be planned, prepared, implemented and reviewed (Slabbert, 2018).

Dhanesh's model of engagement in public relations: By drawing from issues management, the situational theory of publics and the concepts of dialogue and ethical communication, Dhanesh's (2017) model for engagement in public relations entail the following:

This model is built on salience as an antecedent of engagement, with the perspective that topics of mutual interest connect publics and organizations. Salient stakeholders, as outlined by Mitchell, Agle and Wood (1997) in their theory of stakeholder identification and salience (TSIS), refer to stakeholders with power, legitimacy and urgency. Similarly, an issue of mutual saliency sparks engagement. This is congruent with the concept of "materiality" as stipulated in the AA1000APS (2018) which refers to "a topic that will substantively influence and impact the assessments, decisions, actions and performance of an organisation and its stakeholders in the short, medium and/or long-term" (AA1000APS, 2018). It could therefore be argued that the organisation and its stakeholders will engage on material/salient issues. Salient or material issues are normally evident in "issue arenas" which is regarded as "communication networks in which active stakeholders discuss topics and involve passive stakeholders" (Hellsten, *et al*, 2019). They argue that these places of communicative interaction allow active stakeholders (authors) to put topics on the agenda, initiate social change and mobilise other stakeholders. Organisations that participate in the conversation could actively engage in interpreting and reformulating the issue of discussion as it could affect the organisation's legitimacy (Hellsten *et al.,* 2019).

Dhanesh's model further indicates that an affective and cognitive engagement with a salient issue triggers a search for more information that could range from passive information seeking endeavours to more active information seeking activities. Organizations could vary their communication models depending on the affected publics' communicative behaviour. One-way dissemination and public information models could be useful for passive information seekers, while dialogic, participatory and collaborative models of communication could be more conducive to active information seekers. These communication models are applied across a continuum of engagement as control and engagement as collaboration depending on the communicative behaviour of the target publics. From the public's perspective, being engaged encapsulates cognitive (problem and constraint recognition), affective (emotional connection to the issue) and behavioural (online and offline material/communicative expression of thought and emotion) dimensions.

From this perspective, Dhanesh (2017) asserts that "engagement is an affective, cognitive and behavioural state wherein publics and organisations who share mutual interests in salient topics interact along continua that range from passive to active and from control to collaboration, and is aimed at goal attainment, adjustment and adaption for both publics and organizations". Existing engagement literature also emphasises various engagement complexities that should be deliberated for an approach to multiple stakeholder engagement.

Engagement complexities: Dhanesh (2017) contends that a stakeholder will only seek information on an issue if the issue is highly salient to the respective stakeholder. Despite the high degree of saliency and the stakeholder being affectively, cognitively and behaviourally engaged, it still does not guarantee that this stakeholder will interact with the organisation on the issue. The stakeholder might still choose to seek information from mediated sources or active, connected influencers and/or opinion leaders. This might be ascribed to the fact that specific stakeholder groups often quantitatively and qualitatively dominate discourse in engagement (Manetti & Bellucci, 2016). The contrary of this engagement complexity could also be true: Instead of engaging directly with a specific stakeholder group, organisations might find it easier to engage with social media influencers and/or active connected stakeholders to reach a wider group of stakeholders.

The organisation might be reluctant to engage in dialogic communication with stakeholders in order to maintain control over communication, especially when social media is used as an engagement medium and/or during crisis situations (Dhanesh, 2017). Furthermore, stakeholders might be unwilling to share information if there is no personal benefit or gain for sharing information. There could also be an overall lack of listening to others and a commitment to collaborate (Manetti & Belucci, 2016). Taylor and Kent (2014) specifically warn that *dialogue* should not be confused with *dialogic*. Dialogic precedes dialogue and encapsulates the procedural steps in creating dialogue. Furthermore, mutual trust between communicative parties enables dialogical engagement. It could thus be argued that there are various foundational enablers to dialogic engagement.

The AA1000 Stakeholder Engagement Standard (2015) specifically underlines engagement complexities for both the organisation and stakeholders. Stakeholder complexities could also include participation fatigue; disruptive stakeholders; uninformed and disempowered stakeholders; and conflict between participating stakeholders. Organisational complexities could further include, among others, a waste of time and financial resources; strong criticism; an inability to meet the organisation's expectations and a conflict of interest.

Engagement considerations: The above literature review on engagement perspectives, frameworks and complexities culminated in various engagement considerations, which could be used as foundation for a polyphonic strategic communication perspective to multiple stakeholder engagement: Firstly, engagement between the organisation and stakeholders are based on a topic of mutual salience. The organisation has to ensure that these issues are actively identified. Secondly, although not always the case, engagement is intended to be a dialogic process where communicative parties collaborate towards the co-creation of meaning and solutions to a salient issue. Thirdly, there are important antecedents that enable stakeholder engagement. The organisation has to ensure that these prerequisites are in place. Fourthly, despite the existence of engagement antecedents and the necessary platforms to engage, it does not guarantee that the respective stakeholder will engage with the organisation. The organisation might also find that it could be more beneficial to engage with active, connected stakeholders to reach a wider a group of stakeholders. It is thus essential that the organisation build and foster relations with related opinion leaders. Lastly, engagement is seemingly a deliberate process towards the resolution of a salient issue and a means to build sustainable stakeholder relationships with strategic stakeholders. Engagement with secondary stakeholders could be regarded as more reactive in nature based on working relationships. From this perspective, the stakeholder engagement process is directly linked with the overall stakeholder identification strategy of the organisation.

4. The Role of the Strategic Communication Professional in Stakeholder Engagement

It is widely accepted that the communication function in an organization plays a fundamental role in the engagement process. Jelen-Sanchez (2017) contends that the cultivation of engagement is perceived as one of the core tasks of the communication professional while Devin and Lane (2014) regard communication as an essential "building block" of engagement. To elaborate on the essence of engagement, Verwey, Benecke and Muir (2017) state that communication professionals "are responsible for facilitating the sense and meaning making activities between diverse groups" and ensuring that these groups "are given a share of voice to state their views and collaborate in creating new knowledge" (p. 76). Furthermore, the task of communicators is increasingly to create connection within a disengaged world (Verčič & Vokić, 2018; Sievert & Scholtz, 2017).

Slabbert (2018) draws on the aligning dimension of strategic communication (consisting of boundary spanning, environmental scanning and bridging) proposed by Invernezzi and Romenti (2015) to emphasize the role of the strategic communication professional in stakeholder engagement. This dimension emphasises that in line with the objectives of the organisation towards achieving its mission, the strategic communication professional plays a critical role in identifying material issues and topics for engagement through boundary spanning and environmental scanning activities. Verwey *et al.* (2017) assert that when the contemporary strategic communication professional embraces and expands boundary-spanning activities, it will "enable collaboration between variously situated participants from a variety of disciplinary and social, and institutional contexts, and to embrace mechanisms of stakeholder participation". Through bridging, the strategic communication professional acts as facilitator in creating a network of mutual responsibility by eliciting conversation and debate, and stimulating dissent with strategic stakeholders. To establish accountability, it is essential that the strategic communication professional facilitate transparent and consistent organisational statements and actions. Thus, the emphasis should be on bridging stakeholder claims and actions by ensuring that the organisation adapts its activities to conform to the expectations of strategic stakeholders.

Based on the this foundational literature review, the following section will focus on polyphony in strategic communication to specifically underline the role of the strategic communication professional in the stakeholder engagement process.

Polyphony in Strategic Communication

Elements such as globalization and interactive communication technologies have changed the traditional, modernistic organizational management context of efficacy, rigidity, hierarchy to control and divisions to facilitate authority to a postmodern context of effectiveness, flexibility, delayering to empower and sharing of knowledge through teamwork (Kemp, 2013). This, coupled with the increasingly pluralistic organizational environment, contributed to displacing the functional understanding of strategic communication as one-to-many communication with many-to-many communication (Zerfass & Schneider, 2018). In essence, this has led to the redefinition of the strategic communication function in the organization (Verwey *et al.,* 2017).

Strategic communication through a critical, postmodern lens: Strategic communication paradigms have evolved from a stringent managerial view to an emergent, reflective and multi-paradigmatic approach (Verwey *et al.,* 2017). More specifically, mainstream strategic communication, situated within a modernistic paradigm that is driven by normative theories such as Grunig's (1984) excellence theory, regarded the field as a "management orientated practice that can be strategically planned, tactically executed and empirically evaluated" (Jelen-Sanchez, 2017). Strategic communication in this context is regarded as a means to influence, coordinate and control through functionalist, linear models of communication interaction (Deetz & McClellan, 2011). Definitions of strategic communication framed within a modernistic paradigm neglect emergent and pragmatic strategies; are too organisational centric and not inclusive of stakeholder interests; it discounts the constitutive role of communication in generating strategy and is too focused on strategic communication professionals as opposed to the communication activities of other organisational members (Zerfass, *et al*, 2018).

In contrast, contemporary strategic communication draws from both a *postmodern* paradigm, thereby viewing communication as a fluid notion created through discourse and a *critical* perspective, thus discouraging the concept of managerialism (where managers assign workers to authoritarian workplace activities predominantly to benefit themselves) and power structures (Jelen-Sanchez, 2017). In this context, Zerfass *et al.* (2018) define strategic communication as "all communication that is substantial for the survival and sustained success of an entity. Specifically, strategic communication is the purposeful use of communication by an organization or other to engage in conversations of strategic significance and goals". This definition has several implications that should be taken into consideration (Zerfass *et al.,* 2018): Although purposeful communication allows for the sharing of meaning and ideas, deepens mutual understanding and creates meaningful action (Hodges & Gill, 2015), not all purposive communication will be strategic. Since conversations of strategic significance will occur in various arenas, ranging from global spheres to individual conversations, communicators should have an acute awareness of the changing communication landscape, the technological drivers and various influencers thereof. Communication includes both messaging and listening which could be disseminated through various kinds of earned, paid, owned and shared media channels. The term "entity' should be interpreted as both a broad and scalable term: Broadly speaking, it refers to corporations, governments, non-profits, social movements and known individuals in the public sphere. A topic will be in the public sphere, which is regarded as a "network of points of interest", as communicators, as points in the network, communicates about it (Bentele & Nothhaft, 2010). As a scalable term, it comprises an actor or group of actors with a specific sphere of responsibility, a specified purpose in the sphere and a limited amount of resources to fulfil the respective purpose.

Heide, *et al.* (2018) further indicate that some core assumptions of the Communicative Constitution of the organisation (CCO) approach (which is a collection of perspectives on the "role of communication in the ontology of the organizations") are significant towards a contemporary understanding of strategic communication:

Bottom-up: Organisations emerge from bottom-up, not top-down, which implies that the organisation is the result of continuous sense-making and communication. Similarly, Overton-de Klerk and Verwey (2013) state that contemporary strategic communication should favour bottom-up communication where meaning is created by the communication process itself.

Emergency: Emergency sprout from Mintzberg's idea that strategies are not only planned but are also emergent (Winkler & Etter, 2018). In line with the notion of 'the organisation as becoming' (Weick & Quinn, 1999; Tsoukas & Chia, 2002), emergency is concerned with how organisational members construct their social reality (Graetz, *et al*, 2006). It is thus concerned with how organisational members constitute strategy through communication. Since emergency is established in both practice-based strategy research and constitutive approaches to communication, emergency is regarded as one of the greatest future challenges for strategic communication as it confronts the instrumental approach to strategy and the corresponding understanding of communication (Winkler & Etter, 2018).

Communicative practice: At the heart of the notion that strategy is something that is created and realised by organisational members, strategy is perceived as a communicative practice that is enacted at different organisational levels while the organisation continuously reinvents itself.

Polyphonic or multi-voiced: Polyphony within organisations refers to the notion of "multiple contrasting voices that express themselves simultaneously and autonomously" (Christensen, *et al*, 2015). This implies that an organisation is "constituted in a multiplicity of voices" (Christensen & Cornelissen, 2018). In proposing a dual narrative lens on strategic communication, Winkler and Etter (2018) contend that strategic communication hardly ever follows a linear process, but is usually disputed, circular and polyphonic in nature.

From the above discussion it could be deduced that contemporary strategic communication moves away from being a centralised, linear, planned and management-induced process towards a more decentralised, ritualistic process appreciative of diverse voices, emergency and continuous stakeholder input. Polyphony, as

an emergent mode of strategic communication, will be used as a platform for an approach to multiple stakeholder engagement.

Polyphonic strategic communication as multi-voiced strategy: The musical concept "polyphony" has been used in a myriad of disciplines, for example, literature, politics, theatre and film, psychology and philosophy. For the purpose of this paper, Zerfass and Schneider's (2018) application of polyphony to organisational and corporate communication will be used as a contemporary development in strategic communication to ground multiple stakeholder engagement. In this context, they define polyphony as "the integration of a multiplicity of internal and external voices into communication processes that are performed on behalf of the organization" (p. 19). It is argued that the main challenge for strategic communication professionals lies in the integration of these diverse voices (plurality) into definite values of communication (unity) while simultaneously ensuring alignment with strategic communication objectives (Zerfass & Schneider, 2018).

A multi-voiced strategy will necessitate an open mindset and an appreciation of diverse voices where communication becomes the task of the entire organization, not just the strategic communication professional (Zerfass & Schneider, 2018). In conceptualizing an organization-wide polyphonic communication policy, Zerfass and Schneider (2018) propose two conceptual perspectives, namely, deliberate emergency and radical emergency, depending on the controllability of voices. It should be noted that tendencies towards deliberate emergency or radical emergency are proposed as it is argued that no strategy could fully be deliberate emergent or radical emergent. These two conceptual perspectives to polyphony are summarized in Table 1.

Table 1: Deliberate vs radical emergent polyphony in strategic communication

	Deliberate emergency	**Radical emergency**
Key proponents	All stakeholders take on a communicative role in the organization. There is an acknowledgement to manage an organization's communication by means of a communication department / strategic communication professional overseeing the communication function.	All stakeholders create communication. Strategic communication professionals or the communication department accepts, at the most, a coaching role to other stakeholders. All voices cooperate in the dissemination of organizational messages, the inclusion of valuable organization-related information from internal and external constituencies and internal sharing of the acquired information.
Creation of unity	Unity arises from planning approaches and managing plurality through a set of strategic guidelines.	Unity develops out of plurality itself by securing common rules (that serve as the self-steering of voices by defining rules of their situational interplay).
Management of communication by the strategic communication professional / communication department	Centralized. The strategic communication professional selects appropriate speakers in the organization and outlines communication barriers and the amount of freedom in which polyphony could unfold.	Decentralized. Semi-autonomous groups developing organic forms of communication management.
Multi-voiced approach	With a high controllability of voices and low autonomy of voices, voices are *enabled* to communicate.	With a high autonomy of voices and low controllability of voices, voices are *enabled* and *empowered* to implement communication independently.

From the above table it could be inferred that the higher the controllability of the voices, the more centralized the approach to emergency and the strategic communication function could be. Since strategic

communication professionals are seemingly slow in the uptake of emergent developments in practice (Verwey & Overton-de Klerk, 2013), it could be argued that large organizations that are by default more rigid and hierarchical in structure will be more conducive towards a deliberate emergency approach, while a smaller, organically structured organization could have a stronger tendency towards radical emergency.

Based on the preceding literature review and the proposed approach to emergency outlined in Table 1, the following section will provide an approach to multiple stakeholder engagement.

5. Theoretical Framework

From the above insights, stakeholder engagement could be defined, in the context of this paper and in line with a dialogical approach to engagement, as follows:

It is a collaborative effort that allows reciprocal decision-making between the organization and strategic stakeholder/s brought about by a topic of mutual salience (material issue) that, depending on the controllability of voices, could emerge from plurality through stakeholder empowerment or by managing plurality through stakeholder enablement, towards the co-creation of meaning and resolutions to material issues.

In the context of this definition and proposed framework, it is argued that stakeholder engagement is facilitated by the strategic communication function/professional in the organization either as a centralized function with clear guidelines to stakeholder engagement or in a more decentralized capacity by fulfilling a coaching role.

Figure 1: Multiple stakeholder engagement framework from a polyphonic strategic communication perspective
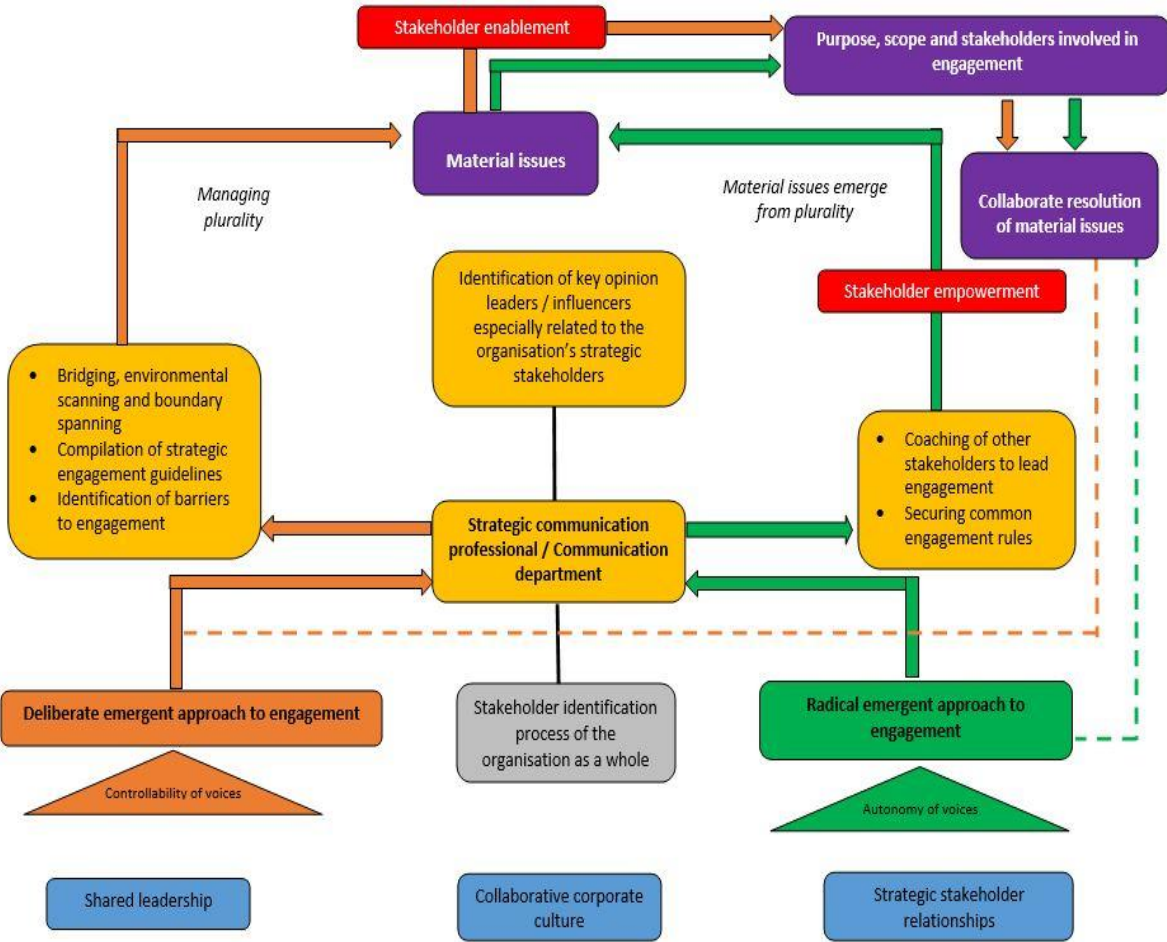
In congruence with a postmodern, critical strategic communication perspective proposed in this paper, it is argued that stakeholder engagement as a predetermined and categorized activity based on the degree of

influence that a stakeholder has on the organization, should be replaced by emerging forms of negotiation that necessitates a reconfiguration of social relations (Verwey, *et al.,* 2017). Although the uptake of emergent approaches should become a key priority for the contemporary organization, it should be noted that "the dominant coalition is still largely orientated towards instrumental strategy" (Winkler & Etter, 2018). The reality is therefore that it will take time for strategic communication professionals to become accustomed to these contemporary developments but will also require a reconfiguration of the structure, leadership and mindset of the organization itself. Furthermore, as stated earlier, stakeholder engagement is, to some extent, a deliberate process as it is driven by salient issues, requires resources and is implemented as a means to build sustainable relationships with strategic stakeholders.

It is for these actualities in practice that polyphonic strategic communication is applied to stakeholder engagement as it acknowledges contemporary emergent approaches and the reality of the current organizational context (which is seemingly still orientated towards functional strategy and communication). Based on this argument, the proposed framework is aligned with an integrative approach to the implementation of emergency as "there is place for both a functionalist and an emerging strategic process in organizations, which depends on transformational and visionary leadership and broad stakeholder participation" (Winkler & Etter, 2018). It is for these actualities in practice that polyphonic strategic communication is applied to stakeholder engagement as it acknowledges contemporary emergent approaches and the reality of the current organizational context. In doing so, this approach proposes that larger, hierarchal organizations could have stronger tendencies towards a deliberate emergent approach with a centralized strategic communication function to stakeholder engagement. On the contrary, smaller, organic organizations could be more favourable to a radical emergent approach with a decentralized strategic communication function to stakeholder engagement.

Figure 1 firstly indicates that there are various antecedents to stakeholder engagement as a process. These include, but are not limited to, shared leadership, a collaborative corporate culture and strategic stakeholder relationships (Slabbert, 2018). The volatile business environment necessitates organizations to deviate from a leader-follower logic towards collaborative and shared leadership. Holbech (2015) argues that people within a team and organization should lead each other. Such a leadership stance is essential to enable a collaborative organizational culture to elicit an innovative spirit within the organization to allow cooperation and the creation of shared meaning. Furthermore, engagement is regarded as an outcome of an existing organization-stakeholder relationship (Smith & Taylor, 2017). Similarly, the AA1000APS (2018) highlights that stakeholder engagement is directed by the maturity of an existing relationship. It is therefore argued that based on an existing organization-stakeholder relationship, stakeholder engagement serves as a means to build forth towards *sustainable* relationships with strategic stakeholders and, depending on the material issue, engage with secondary stakeholders based on working relationships.

Whether a deliberate emergent or radical emergent approach is applied to stakeholder engagement, the strategic communication professional or communication department should cultivate relationships with key influencers and opinion leaders that are specifically relevant to the organization and its strategic stakeholders. This in itself requires, as a starting point, an acknowledgement of the organization's stakeholder identification process as a whole. The cultivation of relationships with these opinion leaders and influencers are critical as it was indicated that stakeholders might, despite a topic of mutual salience and the establishment of engagement platforms, decide to rather engage with a key influencer as opposed to engaging with the organization.

As depicted in Figure 1, the difference between a deliberate and radical emergent approach to stakeholder engagement lies within the identification of material issues / topics of mutual salience. When a deliberate emergent approach to stakeholder engagement is applied, the strategic communication professional or communication department fulfils a centralized role and the controllability of the voices are high. In the context of engagement, this implies that the strategic communication professional will conduct boundary spanning, bridging and environmental scanning to elicit conversation to identify barriers to engagement and material issues. Furthermore, the strategic communication professional is also responsible for compiling specific engagement guidelines. On this basis, organizational members are enabled to engage with strategic

stakeholders. In contrast, a radical emergent approach to stakeholder engagement allows the strategic communication professional to fulfil a coaching role to empower organizational members to have conversations with strategic stakeholders to identify material issues. The autonomy of voices in this capacity therefore allows for the identification of material issues as opposed to a conversation around a pre-determined material issue.

Once the material issues have been identified, both approaches necessitate that the purpose, scope and stakeholders of the engagement endeavour should be identified, as "the way in which an organization engages and communicates with stakeholders will depend on the capacities of both…" (AA1000APS, 2018). This particular step might still be perceived as a modernistic and planned activity to engagement, but it is critical to determine what resources are available to most effectively work towards a collaborative resolution of the identified material issue/s. It should also be noted that the stakeholder engagement process is depicted as a continuous process.

6. Conclusion

This paper addresses the need for theory building in stakeholder engagement through the proposition of a multiple stakeholder engagement framework from a polyphonic strategic communication perspective. This framework serves as a heuristic for future research and provides a starting point for the uptake of multi-voiced approaches in strategic communication. This paper also emphasizes the role of the strategic communication professional in the stakeholder engagement process.

This paper is limited as it only provides a theoretical framework and the pragmatic relevance of this framework has to be established. Since qualitative research is of specific relevance in the current milieu of postmodernism and critical theory (Jelen-Sanchez, 2017), an exploration of this framework by means of focus groups and interviews could have value. Such a methodological strategy will focus on exploring strategic communication professionals' inputs on their involvement in stakeholder engagement and obtain the perspectives from leaders of both large and small South African organizations to determine the pragmatic value of this approach. Extensive quantitative testing is also required to build forth towards a multiple stakeholder engagement model. Such a model should also provide more detail on the actual steps in planning and implementing an engagement endeavour and how multiple stakeholder needs are balanced and addressed in such a multi-voiced engagement strategy. Although this paper aims to provide a generic approach that is not specific to an organizational type or industry, future research could provide a more customized approach where specific strategic stakeholder groups are identified.

"Organizations operate in complex, dynamic environments in which several issues are present simultaneously, initiated and discussed by different stakeholders and other actors…" which "…challenges organization-cantered approaches to stakeholder engagement" (Hellsten *et al.*, 2019). It will however take time for organizations to depart from instrumental strategy and the conventional way of doing. Strategic communication professionals could play an indispensable role in guiding organizations towards the uptake of emergent strategy and specifically towards a multi-voiced approach to stakeholder engagement.

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Paper 4

Do the perceived accountancy skills of fast-moving consumer goods Small, Medium and Micro Enterprise employees influence the attainment of key financial objectives?

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Abstract: In South Africa, Small, Medium and Micro Enterprises (SMMEs) play a substantial role in the creation of socio-economic value within the national economy. In particular, these business entities assist with the creation of employment opportunities, the equal dissemination of wealth and the contribution to the national Gross Domestic Product. Based on previous studies, however, South African SMMEs have a dismal sustainability rate since approximately 75 per cent of these business entities fail after being in existence for only three years. Among the economic factors researched which adversely affect South African SMMEs' sustainability is the pandemic of scarce skills; of which one is accountancy skills. To this end, for this study, the emphasis was placed on whether the perceived accountancy skills of South African fast moving consumer goods (FMCG) SMME employees influenced the attainment of their SMMEs' key financial objectives. Empirical research was conducted which constituted both survey research and quantitative research, and a total of 500 responses were received from FMCG SMME owners/managers. Stemming from the results it was established that the perceived accountancy skills of South African FMCG employees did have a statistically significant influence on the attainment of key financial objectives, though very weak.

Keywords: Accountancy skills, SMMEs, South Africa, Financial objectives

1. Introduction

Within a South African dispensation, the concept of Small, Medium and Micro Enterprises (SMMEs) was formally recognized by the South African government through the publication of the National Small Business Act No. 102 of 1996 (South Africa, 1996). In this Act, SMMEs are defined as follows:
"[S]eparate and distinct business entit[ies], together with its branches or subsidiaries, if any, including cooperative enterprises, managed by one owner or more predominantly carried on in any sector or subsector of the economy … by satisfying the [classification] criteria"

Over the years, a few updates have been made in relation to the classification criteria of these business entities (South Africa, 2003; South Africa, 2004); the most recent one taking place at the start of 2019. Based on the most recently updated classification criteria, simply put, SMMEs can be demarcated as micro enterprises (employing between 0 and 10 full-time employees), small enterprises (employing between 11 and 50 full-time employees) and medium enterprises (employing between 51 and 250 full-time employees)[1] (South Africa, 2019). According to prior research (Ayandibu & Houghton, 2017; Bruwer & Van Den Berg, 2017), South African SMMEs contribute significantly to the national Gross Domestic Product (at least 35 per cent) while also employing a substantial amount of the South African workforce (at least 50 per cent). Despite

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[1] Moreover, pending on the industry of operation, SMMEs can be categorized in terms of their annual turnover – ranging between R5 000 000 and R220 000 000 (South Africa, 2019).

the foregoing statistics, it is reported that these business entities have among the worst sustainability[2] rates in the world (Wiese, 2014; Bruwer, 2016). This view is supported by past studies (Masama, 2017; Petersen, 2018) where it was found that approximately 75 per cent of South African SMMEs fail after being in existence for three years.

The dire situation pertaining to South African SMME sustainability has been pinned on the non-management of economic factors – those factors which affect a nation's economy and entities operating within its geographical boundaries- which include increases in taxation rates, increases in inflation, supply and demand volatility and decreases in service delivery quality (Kunene, 2008; Kadocsa & Francsovics, 2011; Masama & Bruwer, 2018). Among these economic factors is the pandemic of scarce skills (Bruwer *et al.*, 2019a). In South Africa, the pandemic of scarce skills was predominantly caused by the country's political history (Apartheid) whereby non-white residents, encompassing the majority of the South African population, were excluded from reasonable access to quality education (Mbinda & Spencer, 2016; Bruwer & Smith, 2018). Since the start of Democracy in 1994 however (over the past 25 years) the South African government has made efforts to minimize the scarce skills gap through skill development initiatives (South Africa, 2016). One of the scarce business skills which exist in South Africa today is that of accountancy skills – those skills that comprise a mixture of accounting skills, management skills, financial management skills and business management skills (Bruwer *et al.*, 2019b; Mbumbo *et al.*, 2019). Albeit the pandemic of scarce skills in South Africa, previous studies (Thorissón *et al.*, 2014; Demetriou *et al.*, 2016) suggest that any skill can be learned through proper teaching and learning initiatives.

Using the above as a foundation, it becomes apparent that South African SMME sustainability may be directly influenced by the skills of human resources which, in turn, may directly influence the manner in which relevant business objective is achieved. To this end, the primary research objective that was empirically investigated in this study reads as follows:

To ascertain whether the perceived accountancy skills of employees in South African SMMEs had a statistically significant influence on the attainment of key financial objectives
For the remainder of this paper, discussion takes place under the following main headings: 1) literature review, 2) research design and methodology, 3) results and discussion, 4) conclusion, and 5) avenues for further research.

2. Literature Review

For this section, relevant discussion takes place with the main intent to conceptualize variables which were statistically analyzed (see Section 4). To this end, this section is divided under the following sub-headings: 1) accountancy skills, and 2) key financial objectives.

Accountancy skills: In a small business dispensation, the aspect of accountancy plays a very significant role (Padachi, 2010). Unsurprisingly, in a fast-paced, ever-changing business environment, South African SMMEs have been reported to seek business-related advice from accountants (Gooderham *et al.,* 2004; Brijlal, *et al.*, 2014). Fundamentally, accountancy should provide information regarding the overall financial performance and financial position of a business to allow for management to make proper business-related decisions (Maseko & Manyani 2011; Fatoki, 2012; Beck *et al.*, 2016).

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[2] The term 'sustainability' pertains to the attainment of relevant objectives which may include that of economic objectives, social objectives and/or environmental objectives, all with the intent to help a business entity to remain in operation for the foreseeable future (Bruwer, 2016).

Notwithstanding the above, Blackburn *et al.* (2010) aver that South African SMME owners and/or managers are unlikely to obtain business-related advice from accountants, external to these business entities unless they believe that such advice would provide value for money. This is especially the case since the services that these external accountants provide come at a cost which SMMEs may not be able to afford (Kibuuka & Tustin, 2019). To this end, SMMEs predominantly rely greatly on the relevant knowledge of their owners and/or managers to provide information regarding their overall financial performance and financial position (Bruwer, 2010).

Using the above as a basis, previous studies (Orford *et al.*, 2003; Marx *et al.*, 2004; Schwarze, 2008; Olusola, 2011; Phenya, 2011; Kirsten, 2013) suggest that owners and/or managers of South African SMMEs should obtain skills related to accountancy to better assist their relevant businesses in the making of short-term decisions affecting their overall sustainability. Taking into account the work of Bruwer and Smith (2018) and Bruwer *et al*. (2019a), the concept of accountancy skills was conceptualized as a mixture of accounting skills, business management skills, financial management skills and management skills – summarized in Table 1.

Table 1: Conceptualization of accountancy skills (Sources: Bruwer *et al.*, 2019a; Bruwer and Smith, 2018)

Individual skill	Description
Accounting skills	Those competencies required to perform functions regarding the recording of transactions, reporting of the financial situation of a business entity and the providing of recommendations to enhance the financial situation of a business entity.
Business management skills	Those competencies related to the holistic planning activities, organising activities, leading activities and controlling activities in a business entity.
Financial management skills	Those competencies required to efficiently and effectively manage money in such a manner to accomplish financial objectives of a business entity.
Management skills	Those competencies related to problem-solving, decision making, planning, delegation, communication and time management.

Key financial objectives: Financial objectives are goals of a financial nature which a business entity aims to achieve as part its financial plan, with the main intent to ensure that the particular business entity remains in existence in the foreseeable future (Beck *et al.*, 2016; Statistics Canada; 2018; BusinessDictionary, 2019). In a general sense, the key financial objectives of any business entity entail that of profitability, solvency and liquidity – as summarised in Table 2.

Table 2: Three main financial targets (Sources: Beck *et al.*, 2016; Ngary *et al.*, 2014)

Financial targets	Description
Profitability	A business entity's ability to make a profit both in the long and short-term – whether the income of the business is greater than its expenses.
Solvency	The extent to which a business entity's assets cover future commitments (liabilities).
Liquidity	Whether a business entity's cash on hand is adequate to continue with its daily business operations (to cover short-term debt).

From a South African SMME perspective, however previous research studies (Van Eeden *et al.*, 2004; Fatoki, 2012; Fatoki, 2014; Ngary *et al.*, 2014; Bruwer & Coetzee, 2017) show that South African SMMEs are not achieving their key financial objectives. This may have to do with the fact that owners and/or managers have to wear many hats at a given point of time when tending to business aspects (Petkovic & Rac, 2009; Du Plooy *et al.*, 2005; Padachi, 2010; Kemp *et al.*, 2015). Regardless of the foregoing, when taking into account the appalling sustainability rate of South African SMMEs (Bruwer, 2016; Masama & Bruwer, 2018; Mwangi & Gachunga, 2014) it becomes ostensible that the high failure of these business entities may be strongly related with the non-attainment of their financial objectives.

3. Research Design and Methodology

This study was empirical in nature and constituted exploratory research. This is justified by the fact that only one recent and local research study (Bruwer *et al.*, 2019b) existed which pertained to the primary research objective of this study. Furthermore, this study was survey research whereby questionnaires – comprising mostly closed questions – were submitted to respondents for completion. Taking into account that the questionnaires comprised mostly Likert-scale questions, this study was deemed to be quantitative in nature, falling within the positivistic research paradigm. As no formal database exists containing the number of South African SMMEs in existence, a mixture of two non-probability sampling methods was used. In particular, convenience sampling and purposive sampling was used whereby a total of 500 SMME owners/managers were targeted – all 500 positively responded yielding a 100% response rate. Similarly, to the study of Bruwer *et al.* (2019b), each respondent had to adhere to the following delineation criteria:

- Should have been an owner/manager of his/her South African SMME.
- Should have had decision making power in his/her South African SMME.
- Should have been at least 18 years of age.
- Should have been a South African citizen.
- Should have been actively involved in the performing of his/her South African SMMEs' operations.
- Should have owned/managed a South African SMME that adheres to the definition of the Small Business Act No. 102 of 1996 and the 2019 classification criteria.
- Should have owned/managed a South African SMME that operated in the fast-moving consumer goods industry.
- Should have owned/managed a South African SMME that operated as a sole trader, partnership or close corporation.
- Should have owned/managed a South African SMME that operated as a non-franchised business entity.
- Should have owned/managed a South African SMME that employed between 0 and 50 full-time employees.
- Should have owned/managed a South African SMME that has been in existence for at least 1 year.
- For this study, relevant ethical considerations were considered. In essence, all respondents were safeguarded from physical harm, all respondents provided their informed consent, all respondents were assured of anonymity and all respondents were guaranteed of the confidentiality of their information provided. Moreover, all respondents voluntarily participated in the study and could at any time, without being discriminated against, withdraw from it without any reason provided.

4. Results and Discussion

For this section, discussion is divided into two sub-headings, namely: 1) descriptive statistics, and 2) inferential statistics.

Descriptive statistics
Considering that all respondents adhered to the delineation criteria, a summary of all remaining demographical information of respondents and their respective SMMEs are summarized in Table 3 and Table 4 below.

Table 3: Demographical information of respondents (Source: Authors' own source)

Aspect	Summary
Position	35.8% were owners, 32.4% were managers, and 31.8% were owner-managers.
Years' experience in position	53.6% had between 1- and 5-years' experience, 34.2% had between 6 and 10 years' experience, and 12.2% had 10 years' or more experience.
Highest qualification	30.2% had primary education, 41.6% had secondary education, and 28.2% had tertiary education.

Table 4: Demographical information about sampled SMMEs (Source: Authors' own source)

Aspect	Summary
Type of business	77.4% were sole traders, 8.8% were partnerships, and 13.8% were close corporations.
Full-time employees employed	92.4% employed between 0 and 10 full-time employees, and 7.6% employed between 11 and 50 full-time employees.
Years in operation	39.6% existed for at between 1 and 5 years, 29.0% existed for between 6 and 10 years, and 31.4% existed for 10 years or more.

From the above, the following two inferences can be made in relation to the average respondents and average sampled SMME:

The average respondent was a South African citizen that was at least 18 years old that, in turn, took on the role of owner/manager in his/her respective South African SMME. He/she was actively involved in the performance of his/her relevant South African SMME's operational activities with 7.38 years' experience in this position while simultaneously having a secondary education. The average sampled SMME was defined as per the National Small Business Act No. 102 of 1996 and the most recent classification criteria (2019) while also operating in the FMCG industry. Moreover, the average SMME was a non-franchised, sole trader micro enterprise that existed for an average of 10.30 years while also employing between 0 and 10 employees.

Respondents were also asked to expand on their business entities' profitability, solvency and liquidity. This was done by asking respondents to rate three statements through means of a 5-point Likert-scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = agree). Each statement started with the base sentence that read: "In my honest opinion, my business ..." A summary of the results is shown in Table 5.

Table 5: Summary of the attainment of key financial objectives (Source: Authors' own source)

Statement	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Mean
Has more income than expenses (is profitable)	0.8%	5.0%	19.4%	56.2%	18.6%	3.87
Has more assets than liabilities (is solvent)	0.6%	6.2%	17.8	53.2%	22.2%	3.90
Has sufficient cash on hand (is liquid)	0.4%	6.2%	15.2%	57.4%	20.8%	3.92

From the statistics in Table 5, it becomes apparent that sampled South African SMMEs, according to management, were profitable (74.8% agreement), solvent (75.4% agreement) and liquid (78.2%). Although these statistics were based on the perception of management, it is probable that these business entities were achieving their key financial objectives when taking into account the number of years (an average of 10.30 years) that they have been in existence. In order to justify these answers, respondents were asked whether their respective SMMEs would remain in existence for the foreseeable future. From the results, 93.0% of respondents agreed with this statement while 7.0% disagreed with this statement.

In addition to the above, respondents were asked to rate whether there is a need for their employees to have appropriately developed accountancy skills. This was done by asking respondents to rate four statements through means of a 5-point Likert-scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = agree). Each statement started with the base sentence that read: "In my honest opinion, this business' employees need to have appropriately developed ..." A summary of the results is shown in Table 6.

Table 6: Summary of the need for appropriately developed accountancy skills (Source: Authors' own source)

Statement	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Mean
Accounting skills	52.6%	12.8%	15.4%	16.0%	3.2%	1.58
Business management skills	40.0%	13.6%	19.0%	20.0%	7.4%	2.06
Financial management skills	41.2%	11.6%	17.2%	25.0%	5.0%	2.04
Management skills	28.2%	13.0%	24.0%	25.8%	9.0%	2.50

From the statistics in Table 6, the inference can be made that employees of sampled South African SMMEs, according to management, did not require to have appropriately developed accountancy skills. This phenomenon may be attributable to the fact that South African SMME management does not make use of formal financial performance measures to a large extent (Bruwer *et al.*, 2018) however, this possibility, though not empirically investigated, falls beyond the scope of this study.

Inferential statistics

Before testing whether the accountancy skills of sampled SMMEs' employees had a statistically significant influence on the attainment of key business financial objectives, factor analysis was performed. This was done by means of performing principle factor axis factoring with the main intent to reduce seven items to two factors. For this to realize, both a Keizer-Myer Olkin (KMO) test value of 0.600 and a Cronbach Alpha value of 0.600 are required (Field, 2009; Cohen & Sayag, 2010). A summary of the tests conducted is shown in Table 7.

Table 7: Principal axis factoring performed with tests (Source: Authors' own source)

Item	Factor loading (Component Matrix)	KMO test value	Cronbach Alpha value
Accounting skills	0.744		
Business management skills	0.868	0.775	0.802
Financial management skills	0.808		
Management skills	0.744		
Profitability	0.676		
Solvency	0.444	0.618	0.641
Liquidity	0.638		

From the statistics in Table 7, justification is provided for grouping the seven items into two factors called *KEY FINANCIAL OBJECTIVES* and *ACCOUNTANCY SKILLS*. To this end, the following regression model was developed:

$$KEY\ FINANCIAL\ OBJECTIVES = \alpha + ACCOUNTANCY\ SKILLS + \varepsilon$$

These two factors are explained below in relation to their composition and measurement in Table 8, from where the results of the linear regression analysis performed is shown in Table 9.

Table 8: Explanation of two factors (Source: Authors' own source)

Factor	Description	Measurement
Key Financial Objectives	Key financial objectives which pertain to profitability, solvency and liquidity	It measures the attainment of sampled South African SMMEs' key financial objectives. It assumes a value between 1 (strongly disagree) and 5 (strongly agree).
Accountancy Skills	Those skills which pertain to that of accounting skills, business management skills, financial management skills and management skills.	It shows whether sampled South African SMMEs' employees had appropriately developed accountancy skills. It assumes a value between 1 (strongly disagree) and 5 (strongly agree).

Table 9: Summary of results of linear regression analysis (Source: Authors' own source)

		Dependent variable Key Financial Objectives
Independent variable	R^2	0.023
	F	11.547
	Sig.	0.001
Accountancy Skills	Std β	0.023***
	Sig.	0.001

*** = Significant at the 1% level

Stemming from the results of Table 9, the calculated R^2 indicates that *KEY FINANCIAL OBJECTIVES* were most likely influenced by variables other than *ACCOUNTANCY SKILLS* (as indicated by α and ε in the developed model above). Notwithstanding the foregoing, there was a very weak statistically significant relationship between *ACCOUNTANCY SKILLS* and *KEY FINANCIAL OBJECTIVES*. The following statistically significant prediction can, therefore, be made:

At a 99% confidence interval, if sampled South African SMMEs' employees are allowed to appropriately develop ACCOUNTANCY SKILLS, it will have a very weak statistically significant positive influence on the attainment of KEY FINANCIAL OBJECTIVES (β = 0.023).

5. Conclusion

Within a South African dispensation, the socio-economic importance of SMMEs cannot be overstated. Although these business entities contribute significant socio-economic value to the South African economy, scholarly literature suggests that 75 per cent of South African SMME fail after being in operation for three years – as influenced by the non-management of economic factors. Notwithstanding the above, the inference can be made that the 25 per cent of these business entities that remain in operation for more than three years are achieving their relevant objectives as they are doing "something right". This study placed focus on whether the perceived accountancy skills of employees in FMCG SMMEs had a statistically significant influence on the attainment of key financial objectives. Stemming from the results of the descriptive statistics, sampled SMMEs were in existence for an average of 10.30 years and their owners and/or managers agreed that these business entities were achieving their financial objectives. Moreover, when asked about the need for SMME employees to have appropriately developed accountancy skills owners and/or managers indicated that there is no need for this.

The results of the inferential statistics provide evidence that although owners and/or managers of sampled SMMEs disregarded the importance of employees having appropriately developed accountancy skills, ACCOUNTANCY SKILLS had a very weak statistically significant positive influence on the attainment of KEY FINANCIAL OBJECTIVES. Hence, when taking into account that many owners and/or managers of SMMEs prefer not to obtain business advice from accountants, it may be that owners and/or managers are skeptical to ask their employees for assistance in this regard.

Avenues for Further Research

Taking into account that employees of sampled SMMEs may contribute towards the attainment of key financial objectives through the use of appropriately developed accountancy skills, the following avenues for further research are suggested:

- The feasibility of developing an 'accountancy for employees' short course and/or programme in South African SMMEs.
- The level of accountancy competencies of SMME employees.
- The influence of accountancy competencies of SMMEs employees on the attainment of key financial objectives.

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Paper 5

The influence of research collaboration and networking (RECON) on research productivity at an accredited South African tertiary education institution

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Abstract: Across the globe, academic staff members of accredited tertiary education institutions are expected to perform tasks pertaining to teaching and learning, research, and community engagement. Particularly in a South African dispensation, research shows that many accredited tertiary education institutions' academic staff members have excessive teaching and learning workloads. This, in turn, adversely affects their research productivity - their abilities to publish research outputs (e.g. articles, conference papers, and books). It should be noted that for every accredited research output produced by a South African accredited tertiary education institution, the institution is entitled to subsidy income from the Department of Higher Education and Training. Regardless of the foregoing, there is a reported decline in research productivity of accredited South African tertiary education institutions' academic staff members. As such, for this study, the phenomenon of Research Collaboration and Networking (RECON) was explored as an intervention to overcome this problem. Empirical research was conducted through means of mixed-method research from where data were collected from a RECON group attached to the Faculty of Business and Management Sciences at an accredited South African tertiary education institution. Stemming from the results, RECON appeared to have a positive influence on the research productivity of sampled academics. Hence it is recommended that dedicated time is allocated for RECON-related tasks on individual teaching and learning timetables of South African accredited tertiary education institutions' academic staff members.

Keywords: *Research, collaboration, networking, South Africa, tertiary education, tertiary education institution*

1. Introduction

In order for a South African tertiary education institution to become accredited (and retain accreditation), be it a public institution or private institution, it should conform to particular, regulatory criteria (SAQA, 2015; CHE, 2019; DHET, 2019). Once accredited, such an institution has the primary mandate to offer a qualification(s) to eligible students[3] to, in turn, graduate. The foregoing is mostly realized through the appointment of academic staff members. South African academic staff members of accredited tertiary education institutions are generally expected to render academic services to those accredited tertiary education institutions which appointed them. More often than not, the academic services performed pertain to the delivery of 1) teaching and learning initiatives (transferring discipline-specific knowledge to students while simultaneously remaining up to date with developments related to a specific discipline), 2) research initiatives (supervising of postgraduate students, conducting research and publishing of research), and 3) community engagement initiatives (giving back to the community and adding value to surrounding communities) (Houston *et al.*, 2006; Strydom, 2011; Poalses & Bezuidenhout, 2018). Although all of the latter initiatives are important, this study emphasized the academic services of research initiatives.

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[3] This depends on the admission criteria of an accredited tertiary education institution.

The term 'research' can be viewed as the investigation of a real-life problem through means of a systematic approach(es) with the main intent to better understand it, solve it and/or mitigate it (Ögeyik, 2013; Bruwer, 2019). Once a research study has been completed, the general intent is to get it published. In core, a 'publish or perish mantra' follows South African academic staff members; essentially rooted in the research publishing dispensation (Miller *et al.*, 2011). According to the Department of Higher Education and Training's (DHET's) *Research Outputs Policy*, research that has been published by academic staff members associated with accredited South African tertiary education institutions, garners research subsidies[4] for such institutions. The policy states the following:

The purpose of this policy is to encourage research productivity by rewarding quality research output at public higher education institutions. The policy is not intended to measure all output, but to enhance productivity by recognizing the major types of research output produced by higher education institutions and further use appropriate proxies to determine the quality of such output (South Africa, 2015)*.*

Building forth on the above, in order for academic staff members to be promoted and to develop professionally, their number of research outputs generated is often used as evaluation criteria (Subbaye, 2017; Sadiq *et al.*, 2019). According to Miller *et al.* (2011) the pressure to publish affects all academic staff members[5]. In some instances academic staff members are also motivated by the prospects of enhancing their professional reputation, leaving a permanent mark on their profession, and increasing their salary and job mobility. Burdened with academic teaching loads, administration responsibilities and community-driven projects, this often leaves little time for research and the writing up of results, let alone publication (Wadesango, 2014).

It is therefore not surprising that South African academic staff members actively request time-off in order to become involved in research initiatives (Snyman & Du Plooy, 2004; Bezuidenhout, 2015). This is further supported by the increased pressure over the years for South African academics to conduct research for their accredited tertiary education institutions. This is particularly due to national government's limited spending on research and development initiatives – equivalent to 0.77% of the Gross Domestic Product (GDP) in 2014, and 1.5% of the GDP in 2015 (Campbell, 2017). The valiant efforts of South African academics are evident in a recent 12-year review of academic research and publication in South Africa, where it was found that research productivity in respect of the number of publications stemming from completed research studies increased year on year (South Africa, 2019). Regardless of this finding, cognizance should be taken that established academic staff members responsible for driving research initiatives are ageing while younger academic staff members are mostly burdened with substantial teaching and learning workloads and related community engagement tasks (Habib & Morrow, 2007). Hence, there is a need to address the problem of potential declines in South African scholarly publications in the nearby future. One manner in which research productivity can be enhanced is through means of creating a platform for research collaboration and networking (RECON) for academic staff members across various disciplines (see Section 2). Thus, the main objective of this study reads as follows:

To establish whether RECON influences the research productivity of academic staff members in a RECON group attached to the Faculty of Business and Management Sciences of one accredited South African tertiary education institution.

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[4] The most recent subsidy per accredited research unit output for 2017/2018 was estimated at R107 222 (CPUT, 2019).

[5] Academic staff members who are appointed on contract are significantly under more pressure to perform in terms of research than those academic staff members who are appointed permanently.

For the remainder of this paper, discussion takes place under the following headings: 1) literature review, 2) research design, methodology and methods, 3) research findings and discussion, 4) recommendations, and 5) conclusion.

2. Literature Review

For this section, literature is reviewed in order to conceptualize relevant terms (i.e. "research productivity", "collaborating" and "networking"), including to showcase their inter-relation in a global dispensation. Therefore, under this section, discussion takes place under the following sub-headings: 1) research productivity in accredited South African tertiary education institutions, 2) RECON in accredited tertiary education institutions, and 3) the inter-relatedness of research productivity and RECON.

Research productivity in accredited South African tertiary South African education institutions: When placing emphasis on the DHET's *Research Outputs Policy*, the facet of 'research integrity' is highlighted. This term alludes to the best practice that completed research studies which are submitted for publication, should undergo a blind peer-review process (by fellow academic staff members); with the main intent to legitimately contribute to existing bodies of knowledge (South Africa, 2015). As such, published research outputs that possess research integrity are recognised by the DHET as accredited outputs. This allows for affiliated accredited South African tertiary education institutions to claim research subsidies from the DHET for their academic staff members' efforts (Habib & Morrow 2007; ASSAF 2018; Tregoning, 2018). Using the foregoing as a foundation the term 'research productivity', within the ambit of this study, has to do with the quantitative measurement of accredited research output generation by accredited South African tertiary education institutions (Barkhuizen & Rothman, 2008; South Africa, 2019). With research productivity being driven by academic staff members of accredited South African tertiary education institutions, this term should not be confused with 'research impact' with pertains to the number of citations a researcher receives on published research outputs (Abramo & D'Angelo, 2014).

Notwithstanding the above, according to a study conducted by Hu and Gill (2000), it was found that although academic staff members share the need to become more involved with research initiatives, their respective workloads seldom allows them to actively pursue research activities. The foregoing is particularly true in South Africa as teaching and learning initiatives are regarded as priority (Habib & Morrow, 2007). It is therefore ostensible that teaching and learning workloads of academics were found to adversely influence their research productivity (Hu & Gill, 2000; Lee & Bozeman 2005; Ukwayi *et al.*, 2013). In order to improve the research productivity of academic staff members, RECON may be a possible intervention.

RECON in accredited tertiary education institutions: In a global dispensation, over the years, the performing of research initiatives has transformed from a "solo-act" to a "conjunct-art" (Iglič *et al.*, 2017). This view is supported by the fact that research should result in the generation of new knowledge in a sphere where change takes place at a rapid pace. In addition, research should also accommodate different perspectives of people in order to enhance the quality of research outputs (Adams, 2012; Dong, *et al.*, 2017; Wuchty, *et al.*, 2007). The foregoing is best performed through co-authorship – an opportunity where more than one academic staff member helps to produce research outputs with the main intent to enhance their research productivity (Bu *et al.*, 2018; Lee & Bozeman, 2005, Petersen, 2015). Despite the growing interest of co-authorship, there are some key practical areas that should be considered.

According to Biagioli (2003), contributor recognition of research output (i.e. actual co-authorship) is a reward that is intrinsically linked to the intellectual contribution of relevant authors. This results in the "rewards" of personal development and increased research productivity (Melin, 2000; Beaver, 2001; Wray, 2002; Biagioli & Galison, 2003; Johari *et al.*, 2012; Huang, 2014; Green & Johnson, 2015). The aspiration to claim such "rewards" are however not good enough reason for co-authorship as value should have been added by relevant authors in order to develop the completed research study into a publishable research output (e.g. conceptualization of terms, developing the research design related to the research output, and performing the data analysis applicable to the research output) with research integrity (ICMJE, 2018; Breet *et al.* 2018).

Thus, from the above, although co-authorship can be viewed as a team effort, it should be noted that such a team consists of individuals with their own motives and agendas; accommodated throughout the entire research process. This is specifically necessary as it may influence and dictate *inter alia* the focus of the research area(s), help eliminate constraints associated with the research output, and allow for the introduction of an interdisciplinary approach to the research output (Subramanyam, 1983; Katz & Martin, 1997; Moss & Kubacki, 2007; Akerlind, 2008; Antelo, 2012; Bridle, *et al.* 2013). The foregoing also allows for bringing an interdisciplinary approach to research (Leisyte *et al.*, 2008).

To this end, the inference can be made that co-authorship is related to RECON. For clarity, RECON is described as the social gathering of researchers with specific niche areas, in a controlled environment, where opportunity is granted for them to conceptualize and/or share research-related ideas and research-related concerns, all with the intent to increase their individual research productivity (Iglič *et al.*, 2017; Zhang *et al.*, 2018). The latter is supported by previous studies (Katz & Martin, 1997; Van Raan, 1998; Laudel 2002; Lee & Bozeman, 2005; Van Rijnsoever & Hessels, 2011; Giudice, 2012), where it was found that RECON tends to increase individual researchers' research reaches[6] as well as their overall research productivity.

The inter-relatedness of research productivity and RECON: Using the work of Huang (2014) as a foundation, research collaboration only started to gain scholarly attention since the early-2000s. In core, research collaboration places emphasis on the attraction of diverse expertise, the enhancement of creativity, and the promotion of innovation (Delaney, 1997; Wray, 2006; Bammer, 2008). Fundamentally speaking, research collaboration is of importance in a South African dispensation due to the act that the DHET provide subsidies for published accredited research outputs to accredited South African tertiary education institutions. In turn, and in some instances, accredited South African tertiary education institutions provide incentives to researchers who participate in such published research outputs as a token of appreciation (Huang, 2014).

Taking into consideration that research collaboration pertains to social innovation (Bukvova, 2010; Huang, 2014) the analogy can be drawn that it has close ties to networking. This view is supported by Ponomariov and Boardman (2016) who found that research collaboration can only realize through means of some form of networking. Taking into account that networking pertains to the meeting and interacting with new researchers with the main intent to develop professional and/or social contacts (Merriam-Webster, 2019), its importance is justified by Block and Keller (2009) through their finding that most published research outputs where there were two authors or more came from different economic sectors and/or different disciplines. To this end, the inference can be made that RECON is recognized as a potential measure in order to enhance the research productivity of researchers. This sentiment is further supported by a formalized shift in the policy-for-science-paradigm, particularly taking into account the preference of funding institutions (e.g. Sector Education and Training Authorities and government institutions) to fund groups of researchers as opposed to funding individual researchers (Guston, 2000; Wuchty *et al.,* 2007; Tsai *et al.*, 2016).

3. Research design, methodology and methods

This study was empirical in nature, comprised exploratory research and constituted both that of survey research and case study research. In essence, a survey was developed with the main intent to obtain data from participants that were partially quantitative; predominantly qualitative in substance – constituting a mixed methods study. The survey contained 13 questions of which seven were open-ended (e.g. long answer questions and short answer questions) and five were closed-ended (e.g. multiple choice questions and Likert-scale questions). Using the foregoing as a foundation, this study was deemed as a mixed-methods study which

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[6] The research career of the average academic staff member spans across 20 years (Van Rijnsoever *et al.*, 2008).

mainly fell within the positivistic research paradigm. Moreover, taking into account that this study entailed the testing of a research question through means of empirical observation, this research was also deductive in nature.

Additionally, this study was conducted from the perspective that RECON between academic staff members in a RECON group attached to the Faculty of Business and Management Sciences at an accredited South African tertiary education institution. In layperson's terms, the study pertained to advocating a horizontal research collaborative approach where researchers from different disciplines look for diverse avenues in which to collaborate and explore research areas that relate to core research ideas (Shaikh, 2015), through interdisciplinary collaboration and networking amongst professionals to enhance their individual research productivity, at various levels. To this end, a non-probability sampling method was used, namely that of purposive sampling. Thus, in order for the responses of participants to be regarded as valid, each participant had to adhere to the following delineation criteria:

- Each participant had to be over the age of 18 years.
- Each participant had to be South African.
- Each participant should have been affiliated with an accredited South African tertiary education institution.
- Each participant should have been part of a group where RECON took place.
- Each participant should have been regarded as an academic.
- Each participant should have had at least a NQF-level 8 qualification.

A total of 24 participants were targeted (the entire population of the RECON group) of which 14 responded; translating to a positive response-rate of 58.3%. Moreover, relevant ethical considerations were taken into account which included that participants were safeguarded from physical harm, participants were able to partake in the study in a comfortable and safe space, participants provided their informed consent prior to voluntarily participate in the study, participants were guaranteed anonymity, the information of participants was guaranteed to be treated with the highest levels of confidentiality and participants could have withdrawn from the study at any point, without reason, without being discriminated against.

4. Research Findings, Results and Discussion

Although all participants adhered to the delineation criteria, a summary of the non-apparent demographical information of participants are shown in Table 1.

Table 1: Summary of delineation criteria of participants (Source: Authors' own source)

Demographical aspect	Summary
Highest qualification	21.4% of participants had an NQF-level 8 qualification as highest qualification, 57.2% had an NQF-level 9 qualification as highest qualification and 21.4% had an NQF-level 10 qualification as highest qualification.
Discipline of focus	43.0% of participants were Tourism and Event Management focused, 21.4% were Sport Management focused, 7.1% was Agriculture focused, 7.1% was Business Information and Administration focused, 7.1% was Accounting focused, 14.3% were Social Science focused

Next, participants were asked to rate their research productivity by means of a 5-point Likert scale (1 = very low, 2 = low, 3 = average, 4 = high and 5 = very high). Stemming from the results 35.7% of participants answered "very low", 14.4% answered "low", 35.7% answered "average", 7.1% answered "high" and 7.1% answered very high. The answers provided by participants rendered a mean-score of 3.64 – translating to an average answer residing between "average" and "high". For clarity, participants were asked to explain their answers provided. These explanations are shown in Table 2 – corresponding to the answers provided by participants.

Table 2: Summary of delineation criteria of participants (Source: Authors' own source)

Rating of research productivity	Summary
Very low	Participant A stated that he/she has only published two accredited articles in his/her academic career.
	Participant B stated that due to work obligations, limited progress has been made with regard to his/her research-related activities.
	Participant C stated that his/her area of expertise makes it difficult to produce research outputs on an annual basis.
	Participant D stated that as the focus is placed on completing his/her thesis to attain an NQF-level 10 qualification, there is no time to focus on the generation of any other research outputs.
	Participant M stated that he/she has not yet delivered anything in relation to research outputs yet.
Low	Participant E stated that he/she is only returning to research after being out of it for a few years.
Average	Participant F stated that he/she completed his/her NQF-level 9 qualification in 2017, produced two research outputs for two international conferences in 2018 and 2019 and started with his/her NQF-level 10 qualification in 2019.
	Participant G stated that he/she has produced approximately two research outputs per year however he/she felt like he/she could publish at least three to four if more time is dedicated to research.
	Participant H stated that there was a change of life circumstances which resulted in the reduction of his/her research output generation.
	Participant I stated that he/she would like to have more research outputs.
	Participant L stated that he/she recently submitted his/her master's thesis.
	Participant N stated that he/she is publishing non-accredited output through media houses.
High	Participant J stated that he/she has started with her NQF-level 9 qualification in 2018 which was only still a dream before joining RECON. His/her work-life balance also affects the generation of his/her research outputs.
Very high	Participant K stated that he/she has managed to get 55 research outputs generated to date, in his/her time in academia.

From the explanations in Table 2, it becomes apparent that the reason for the low research productivity of participants related mostly to the limitations of time, especially since none of the respondents were responsible for solely performing research tasks. It is however evident that none of the participants was unable and/or unwilling to become more involved with research-related tasks. This view is supported by the word cloud stemming from respondents verbatim responses as shown in Figure 1.

Figure 1: Word cloud of respondents' verbatim responses pertaining to their research productivity (Source: Authors' own source).

To this end, participants were asked whether the group where RECON takes place has assisted them with their research productivity. A total of 92.9% of participants indicated "yes" while 7.1% indicated "no". Participants were asked to justify their answers provided; a summary thereof is shown in Table 3.

Table 3: Justification for the reason provided on whether the RECON group assisted with the participants' research productivity (Source: Authors' own source)

Answer provided	Justification
Yes	Participant A stated that it helped him/her to share his/her sorrows and victories in terms of research and has assisted him/her to realise that he/she is not alone.
	Participant B stated that it promotes commitment and supports him/her in terms of obligatory research.
	Participant D stated that It has assisted him/her with his/her thesis, particularly from a motivational perspective and other technical aspects such as research methodology.
	Participant E stated that discussions that take place during RECON sessions motivate and provide him/her with knowledge and enlighten him/her on the obstacles that other people experience with research in general. To him/her, it there is an atmosphere of research enthusiasm and it is interesting to see how each individual handles their own research in their own unique way.
	Participant F stated that it helped him/her to decide on his/her NQF-level 10 qualification's title and to do this qualification as five articles (article based research). It also allowed him/her to find out how other researchers approach their work in terms of timelines and research populations.
	Participant G stated that it is refreshing to hear and share different topics and discuss challenges and more importantly to learn from each other and share tips on how to overcome certain things. This group has inspired and motivated him/her to meet deadlines and opened up the opportunity to collaborate with colleagues.
	Participant H stated that the enthusiasm and creativity of fellow-members are contagious and encouraging to him/her.
	Participant I stated that advice and guidance from other researchers as well as accountability assisted him/her greatly.

Answer provided	Justification
	Participant J stated that research can easily be an isolated activity and a rollercoaster ride. By listening to members of the Recon group, he/she does not feel alone and abnormal. From his/her perspective, RECON fulfils a basic need to belong.
	Participant K stated that RECON sessions are unique platforms where one can motivate others to do research while also remaining motivated to continue to do research.
	Participant L stated that RECON sessions inspired and motivated him/her while he/she also obtained valuable advice from fellow other researchers; learning from others' experiences and frustrations.
	Participant M stated that RECON sessions stimulated him/her to think more in terms of research and talk in terms of research.
	Participant N stated that he/she ask better questions when he/she reads – content shared added value to his/her life.
No	Participant C stated that he/she is a new member of the RECON group.

Using the justifications evident in Table 3 as a foundation, it becomes apparent that the group where RECON takes place did allow for participants to be motivated, to learn and to grow as researchers in an enabling environment. The foregoing is supported by a word cloud from respondents' verbatim responses, as shown in Figure 2.

Figure 2: Word cloud of respondents' verbatim responses pertaining to whether RECON assisted with the research productivity (Source: Authors' own source).

Following this, participants were asked whether collaborating and networking took place in this group. All participants agreed and their verbatim justifications were as follows (verbatim):

"*Me and a fellow member from a different department are in the process of submitting a research paper we did together, across our disciplines. I now know colleagues from all the departments on campus, also where there field of expertise lies*" (Participant A).

"*By sharing information the researchers gain by getting equipped with knowledge and research spin-offs are created. Once you have attended a meeting, new relationships are built and recon assists in maintaining those relationships. Relationships are of extreme value as one person sharing information, which becomes value to the next person*" (Participant B).

"*There are a lot of talks about collaboration between our departments. I met new people*" (Participant C).

"In my case, it has benefitted me in terms of shared resources and capacity enhancement. In this sense, I have expanded my research network with regard to the people in the committee. An agenda item is to update the Recon Committee with the research one is currently busy with. Committee members offer constructive feedback and support in this regard" (Participant D).

"Individuals that participate in sessions literally exchange information; they share resources with each other and definitely enhance the capacity of one another for mutual benefit to achieve a much bigger common purpose. From a personal point of view, I would have really enjoyed it being part of something similar when I was doing my Master's Degree. I think it is of utmost importance that academic institutions create RECON sessions in their specific fields and do not keep anyone out of the loop. Research is part of the future and cannot lack behind. This is an excellent initiative and can be implemented to all FET colleges as well as different universities, even internationally. The RECON is open for participants in research. Therefore if this initiative is implemented at different universities internationally, it will create a platform where even more research can be done. The RECON is an excellent opportunity to invite people to join and network and build academic relationships to also see how research is conducted at different universities and at different levels. My answer is definitely YES! This can be implemented with seminars and conferences as well" (Participant E)

"All members are giving their inputs on what works and what does not work, this allows members to openly discuss matters of common concerns and how to overcome research obstacles. Networking takes place at each RECON meeting and members come from different educational fields and can thus provide good advice and information can cross certain barriers, e.g. tourism and agriculture can see how the information can be used in both fields of study" (Participant F)

"*There is indeed an opportunity to collaborate with peers from different perspectives and research interests through various projects. RECON has brought in people from various backgrounds and industry/ academic experience who have the same research interests. Hence ideas are shared that one does not really consider when one is not exposed to such people on a regular basis*" (Participant G).

"*As long as members have a shared interest, focus and feel rewarded for collaborating they will continue to do so. A platform is provided for people of different academic fields to meet and share. This type of networking rarely happens in academia*" (Participant H).

"*Different professionals and perspectives assist in research and the opening of your mind. We get to meet up in a relaxed environment and feel comfortable enough to share ideas with no judgment but rather support*" (Participant I)

"*RECON provided the platform to talk about 'research' as if it is a common concept and not some or other foreign, difficult term that only Doctors or Professors use. By collaborating, sharing feelings, stories, progress (or the lack thereof) combined with a tranquil setting, a cup of coffee and an atmosphere where Doctor or Professor degrees are not the minimum requirements and we are all people who want to make a difference across various disciplines, one feels 'part of', positive and motivated to show progress. The interesting part of RECON is networking with industry as well as other institutions, as it provides a platform to discuss differences, learn from one another, identify areas where gaps can be filled between education, research and industry and where many creative, but also innovative, ideas are formed*" (Participant J)

"*At RECON, a lot of ideas and resources are shared among members, all with the intent to encourage improvement in research productivity. An array of guests (international and national) has been invited to RECON to share their experiences with regard to research. Moreover, RECON allows for learning about other people beyond one's normal area of focus. This allows for the broadening of one's own horizons and the opening of one's mind*" (Participant K)

"*RECON has added value not only to my work life but also to my research endeavours as well as on a social level*" (Participant L)

The views of respondents are summarized through means of a word cloud, as shown in Figure 3.

Figure 3: Word cloud of respondents' verbatim responses pertaining to whether RECON takes place in the RECON group (Source: Authors' own source).

Lastly, participants were asked whether collaborating and networking, within the group where RECON takes, place, improved their research productivity. To do this, participants were asked to rate their agreement with two statements through a 5-point Likert scale was used (1 = strongly disagree, 2 = disagree, 3 = neither agree or disagree, 4 = agree and 5 = strongly agree). Each statement started with the base sentence: "My research productivity improved due to ..." A summary of the results appears in Table 4.

Table 4: Justification for the reason provided on whether the RECON group assisted with the participants' research productivity (Source: Authors' own source)

Statement	Summary
Collaboration experienced at RECON	50.0% strongly agreed, 28.6% agreed, and 21.4% neither agreed or disagreed (calculated mean-score of 4.3).
Networking experienced at RECON	42.9% strongly agreed, 42.9% agreed, and 14.3% neither agreed or disagreed (calculated mean-score of 4.3).

5. Conclusion and Recommendations

Recommendations: Stemming from the research conducted, the following feasible recommendations are provided with the main intent to solve, mitigate and/or address the identified research problem of this study:

- Groups, where RECON takes place, should be formally recognized by accredited South African tertiary education institutions, by rendering participation in such groups as part of formal workloads of academic staff members. This should lead to the improvement of research productivity among staff members.
- Groups, where RECON takes place, should be formally prioritized by accredited South African tertiary education institutions, by encouraging academic staff members to voluntarily join groups where RECON takes place without evoking any bureaucratic red tape. This too should lead to the improvement of research productivity among staff members.
- Notwithstanding the findings of the study, suggested avenues for further research include *inter alia*:
- The influence of RECON on the publication track-record of individual academic staff members of accredited South African tertiary education institutions.
- The influence of RECON on the research skills of young academic staff members at accredited South African tertiary education institutions.
- The influence of RECON on accredited South African tertiary education institutions' research outputs.

Conclusion: In South Africa, the publication of accredited research outputs is imperative for accredited South African tertiary education institutions, particularly due to the subsidy income it received from the DHET. Unfortunately, scholarly literature shows that although academic staff members of accredited South African tertiary education institutions want to become involved with research initiatives (in order to publish

accredited research outputs) their individual workloads simply do not allow them to do so – adversely affecting the research productivity of such academic staff members.

One manner in which the research productivity of accredited South African academic staff members can be enhanced is through means of RECON - the social gathering of researchers with specific niche areas, in a controlled environment, where opportunity is granted for them to conceptualize and/or share research-related ideas and research-related concerns, all with the intent to increase their individual research productivity. Hence, research was conducted to determine whether RECON influences the research productivity of academic staff members in a RECON group attached to the Faculty of Business and Management Sciences of one accredited South African tertiary education institution.

Stemming from the results, the findings in scholarly literature were justified in the sense that respondents had excessive workloads which negatively influenced their research productivity. Furthermore, respondents indicated that through means of RECON, they believe that their applicable individual research productivity can be improved – allowing for them to develop as researchers, network with fellow researchers from different disciplines and collaborate with fellow researchers on interdisciplinary research studies.

Limitations: Taking into account that this study was conducted with no formal allocated budget while taking into account time constraints (data had to be collected within a span of two weeks), it was subject to limitations. This lead to the authors only covering one RECON group at the particular accredited South African tertiary education institution (scope limitation) based in the Western Cape (geographical limitation).

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Paper 6

Constraints and opportunities for farmer access to bank credit in Zimbabwe: A review

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Abstract: Credit empowers farmers to invest in farm activities and technologies that enhance productivity, income and livelihoods. The main objective of the study was to review the constraints and opportunities for farmer access to bank credit in Zimbabwe. This was done through the review of literature from published journals and financial sector publications. Findings from the study show that agriculture is perceived as risky by lenders due to its vulnerability to weather vagaries and market price fluctuations. Collateral is another key obstacle to bank credit access. Land reforms resulted in the insecurity of land tenure and diminished the collateral base of the agricultural sector. Banks' agricultural loan portfolios are low and biased towards consumptive, cash crop and corporate lending. Bank deposits are dominated by demand deposits that can only be converted into unfavourable short-term loans. Farmer opportunities for credit access are presented by government policies that seek to eliminate credit scarcity. However, these policies' focus is on solving the collateral hurdle, which constitutes a small but crucial element of the lending models that guide banks in determining borrower creditworthiness. These lending models may not be favourable to the entire farming sector. This study, therefore, recommends the development of locally adaptive systems for assessing agricultural loan applications, and the relaxation of collateral demands before loan disbursements. Capital formation should also be adopted in order to improve the physical, human and social capital facets of local farming enterprises to ensure improved farmer creditworthiness.

Key words: *Financial constraints, credit scarcity, collateral, bank credit, creditworthiness*

1. Introduction

The primary role of agriculture is the provision of food (Cheong *et al.*, 2013). Various agricultural activities are also major economic and social mainstays for approximately 500 million smallholder farmers globally (The World Bank, 2017). Moreover, growth emanating from the agricultural sector is estimated at eleven times more effective in reducing poverty than growth from other sectors (Alliance for Green Revolution in Africa [AGRA], 2018). Agriculture accounts for 23% of formal employment, contributes 14-18.5% to the national Gross Domestic Product (GDP), earns approximately 33% of foreign currency and provides a source of livelihood to approximately 80% of the population in Zimbabwe (Ministry Of Agriculture Zimbabwe [MOAZ], 2017). An estimated 59.3% of the country's economically active population is self-employed in agriculture (Swinkels & Chipunza, 2018), while 36% of adults entirely rely on money from farming (The Finmark Trust, 2014). Over 60% of Zimbabwe's agricultural output is absorbed by the manufacturing sector, whilst its 40% balance is either consumed or exported in its natural form (Makamure *et al.*, 2001). As a result, several world development organizations advocate for agriculture financing, particularly in the smallholder-farming sector, where the majority directly rely on agriculture as the main source of livelihood.

The World Bank (2015) declared agriculture as the only way to empower poor farmers to increase their wealth and food production to be able to feed the growing world population. This can only be achievable if annual financial investments in the sector amounting to $80 billion are made. Africa's population is anticipated to double by 2050, denoting that African nations have to double their food production effort to match demand and supply (Garvelink, 2012). Despite commanding a quarter of the world's farmland, Africa generates only 10 percent of all crops produced globally as most of its farmers operate at nearly 40 percent of their potential capacity (Jayaram, *et al.,* 2010). This is attributed to lack of finance, as most farmers have little

or no access to formal credit, thereby constraining capacity to invest in technologies and inputs needed for improving yields and income (International Finance Corporation [IFC], 2014).

According to Shepherd (1979) and Rahji (2000), financial capital is more than just another resource such as labor, land, equipment and raw materials, because it determines access to all other resources on which farmers depend. Access to finance is critical for the agricultural sector's growth and the much-needed transformation of smallholder farmers from subsistence to commercial agriculture (Ruete, 2015). Agriculture is a capital intensive venture at every step of its operations from land preparation and planting the crop to harvesting, and yet according to the IFC (2014), less than 1% of commercial lending and an average of 5% of national budgets are allocated to the agricultural sector in developing countries. Many farmers seeking to start agricultural enterprises may not have accumulated the requisite cash reserves, and are thus forced to rely on borrowing from agricultural lenders (Goeringer & Hanson, 2013). Zimbabwe has not been spared from this highlighted agricultural credit scarcity problem, even though agriculture is stamped as the backbone of the economy.

Banks have a primary function of advancing loans to the productive sectors of the economy, the agricultural sector included (Dhliwayo, 2015). The major assets for banks are loans and bonds, whilst its primary liabilities are made up of deposits (Mavhiki, *et al.,* 2012). Earnings from lending activities account for 80 percent or more of banks' profits (Wong, 1997). Despite their profitability potential, loans come with risk if they are not repaid (Saunders & Cornett, 2007). Credit risk management is thus mandatory in any lending institution because if ignored, it may lead to litigation, financial loss or damage to the reputation of a financial institution (Reserve Bank of Zimbabwe [RBZ], 2006). Thus, most banks strictly adhere to this credit risk management process, which would involve the taking of all appropriate measures that reduce the risk of loss to the loan granting institution (Central Bank of the Bahamas, 2003).

As part of implementing the credit risk management process, banks often make use of lending models to carry out the initial evaluation of their potential borrowers' creditworthiness, involving a careful analysis of information to establish the possibility of loan repayment (Vigano, 1993). The credit analysis process according to the RBZ (2006), requires management to have a clear understanding of the borrower or counter party in order to obtain adequate information for comprehensively assessing their risk profile, which is the essence of the principle of Know Your Customer (KYC). The lending models that are used in this credit analysis process also outline the structure of policies and procedures to be followed before loans are advanced to customers. Banks attach considerable importance to following these stringent lending requirements in order to screen out borrowers who are likely to default, thereby adding an incentive for the borrowers to repay their loans; offset the cost to the lender of a loan default; and to reduce the lending risk (Owusu-Dankwa & Badu, 2013).

Various models are used to assess the potential borrowers' creditworthiness (Abbadi & Karsh, 2013). The existence of such numerous credit analysis models is ascribed to the lack of consensus on a unique set of variables that explain creditworthiness. This is because each financial institution strives to search for specifications that best predict borrower performance and repayment capacity (Zech & Pederson, 2003). This study, therefore, seeks to identify the constraints that Zimbabwean farmers face in accessing bank credit from these formal banking institutions that usually set stringent lending conditions based on diverse lending models. The study also aims to establish the local farmers' opportunities of accessing bank credit in the country.

2. Constraints to agricultural bank credit access in Zimbabwe

Several scholars and financial sector publications have studied the constraints that local farmers face in accessing formal bank credit in Zimbabwe. Most of these studies were done in the aftermath of the land reforms that were implemented in Zimbabwe from the year 2000- 2010. This study, therefore, reviews available literature on this farmer financing challenge, focusing on the period from the year 2000 to date.

Collateral Issues: Collateral requirements are a major financing obstacle that places a critical barrier to accessing credit loans amongst farmers in Zimbabwe (Masiyandima, *et al.*, 2011). Banks in Zimbabwe place much weight and emphasis on collateral at the expense of farmer potential capacity to produce enough volume of the agricultural produce to service their loans (Nyamutowa & Masunda, 2013). Almost all banks in the country demand immovable property as collateral from loan applicants (Masiyandima *et al.,* 2011; Vitoria, *et al.,* 2012). Collateral is also a primary condition even in Agribank, whose key mandate is to finance the agricultural sector in Zimbabwe (Vitoria *et al.*, 2012). Masiyandima *et al.* (2011) however found Agribank less restrictive on the use of collateral in farmer loan appraisals.

The land reforms that were implemented in Zimbabwe from the year 2000- 2010 diminished the collateral base of the agricultural sector because land, which banks previously accepted as loan collateral, became unacceptable due to the insecurity of tenure (Richardson, 2005). All the resettled farmers under the land reform program were allocated farmland without land titles (United Nations, 2014). The resettled farmers were purportedly forced to lease the land annually from the government with no means to borrow against it (Richardson, 2005). Agricultural land in Zimbabwe was thus reduced to "dead capital", since it could not be leveraged and used as equity (de Soto, 2000). Other reasons for the rejection of agricultural loan applications according Masiyandima *et al.* (2011) include poor past performance; lack of farmer's own contribution; poor past loan record and other unspecified reasons. Land offer letters, which most resettled farmers hold as proof of land ownership in Zimbabwe, are not recognized at all by banks in the credit granting process.

Following the land reforms, the proportion of commercial bank loans to the agricultural sector in the country instantaneously diminished from a peak of 91% in 1999 to 15% in 2000, and remained around this level until the year 2005 when it rose to 24% (RBZ, 2006). Makina (2009) attributes this leap to the government driven Agricultural Sector Productivity Enhancement Facility (ASPEF) program that was implemented by the RBZ through several banks to finance the agricultural sector. However, commercial banks' agricultural loan portfolios continued to plummet to 14.8% in the year 2017 (Figure 1; RBZ, 2017). By January 2019, the RBZ's recommended threshold of 20% was eventually reached by the banks on the back of the Command Agriculture financing program implemented jointly by the government and the private sector.

Figure 1: Commercial Banks' Agricultural Loan Portfolios Source: (RBZ, 2006; 2016; 2017; 2019)

Zimbabwean Commercial Banks' Agricultural Loan Portfolios (1999- January 2019)
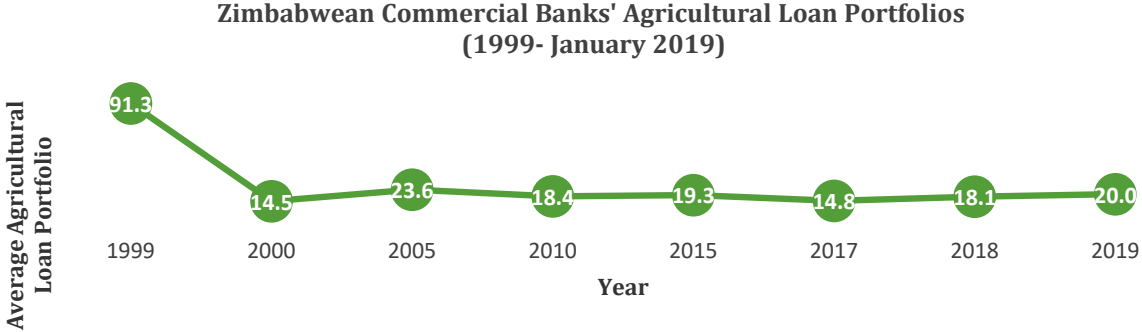
Sector Specific Risks: Banks in Zimbabwe still regard agriculture as risky because of the sector's dependence and vulnerability to the vagaries of the weather (Vitoria *et al.*, 2012). External physical factors like dry spells, diseases and pests have a direct and negative influence on the agricultural production process. Climate and weather factors affect multiple borrowers simultaneously, causing unmanageable connected risks from the financiers' perspective, especially when such climatic hazards reduce agricultural output (Jainzik & Pospielovsky, 2014; Qwabe, 2014).

Climate records show that Zimbabwe is already beginning to experience the effects of climate change, notably rainfall variability and extreme events. These conditions, combined with warming trends, render land increasingly marginal for agriculture. This poses a major threat to the economy due to Zimbabwe's heavy dependence on rain-fed agriculture and climate sensitive resources (Chakoma & Chummun, 2019). Recent

reports produced by the Intergovernmental Panel on Climate Change [IPCC] (2001, 2007, 2012) conclude not only that green-house gas emissions are already beginning to change the global climate, but also that Africa will experience increased water stress, decreased yields from rain-fed agriculture and an increase in arid and semi-arid land as a result of this process. According to the United Nations (2014), drought is the most common hazard in Zimbabwe, which solely accounted for six out of ten top major disasters between 1991 and 2013. The timing and amount of rainfall received in any given season is also becoming increasingly uncertain, whilst the length and frequency of dry spells during the rainy seasons has increased (United Nations, 2014).

Such dependence on weather, according to Nyamutowa & Masunda (2013), often leads to less frequent and seasonal payment of loans, a scenario that is not entertained by banks or any other financial investor. Recent vulnerability assessments in Zimbabwe show that areas regarded as excellent for maize production will decrease from the current 75% to 55% by 2080 under the worst case scenario (United Nations, 2014). All these climatic changes supposedly have a significant impact on agriculture, and also demonstrate the uncertainty of agricultural production at any given point in time, which consequently reduces the financiers' appetite to lend to the sector as opined by Ruete (2015).

Another major risk inherent in agricultural production that repels financial investors like banks is that of output price volatility (Ruete, 2015). Price volatility in the agricultural sector is the excessive variations in agricultural commodity prices over time, encompassing upward and downward price fluctuations around an expected level (House of Lords EU Committee, 2016). Seasonal and general price fluctuations are induced by local, national or international changes in demand and supply, which can be aggravated by quasi-monopolistic market structures for certain goods that have locally dominant buyers (Jainzik & Pospielovsky, 2014). According to Leaver (2004), tobacco prices in Zimbabwe have been extremely volatile since 1986, a response that is attributed to variations in the quality of the tobacco produced. Such reductions in real producer prices of commodities reduce farm profits and hectarage for some planted crops, which turns away financial investors (Muchapondwa, 2009).These drastic price changes also cause variability in farmers' income, and hence affect their repayment capacity (Yaron, 1992). Output price volatility risks also tend to affect many borrowers at the same time, making financiers less willing to advance funds (Jainzik & Pospielovsky 2014).

Politics and Legal Systems: According to the United Nations (2014), political pressures and weak legal systems make it difficult to enforce borrowing contracts between financial institutions and farmers in Zimbabwe. This exposure to political risk by the agricultural sector adds 4-7% to the cost of finance, and acts as a barrier to the availability of finance (Vitoria *et al.*, 2012). Political pressures in Zimbabwe come in the form of government interferences that give directives and pronouncements to state owned or donor supported institutions to extend longer loan grace periods; grant loan roll-overs on loans advanced to farmers; as well as to reduce lending rates (Masiyandima *et al.*, 2011). The dictation of lending rates, especially during the ASPEF era, caused banks to incur losses, explaining why such financing programs failed to have an impact on the agricultural sector's performance (Masiyandima *et al.*, 2011). According to Dale (2009), banks were dictated to charge interest at the rate of 20% per annum at a time when inflation was running at approximately 586% during the implementation of the ASPEF program. These government driven programs also left a culture of non-repayment among Zimbabwean farmers, who saw no need to repay government money because it was nobody's money (Vitoria *et al.*, 2012). Besides encouraging defaults, government leniency tendencies also resulted in bad loan portfolios in the lending institutions, which consequently reduced their desire to deal with the agricultural sector (Vitoria *et al.*, 2012).

Harsh Economic Conditions: The prevailing harsh economic conditions in Zimbabwe have resulted in certain tendencies by banking institutions that act as barriers to bank credit access by local farmers. Most banks prefer to lend to individuals who have guaranteed monthly salaries and wages in the form of salary-based loans (Makina, 2010). Salary-based loans are perceived as a way of spreading risk to avoid loan repayment default because the salaries are received through the respective borrower banks (Makina, 2010). Besides favouring salaried individuals, most financial products are available for business persons, established companies and enterprises, shunning start-up businesses, particularly small-scale farmers (FACASI, 2015).

Banks' stringent requirements like the availing of payslips as proof of formal employment also segregate against most smallholder farmers who are not formally employed, confirming reports that 70% of the economically active population in Zimbabwe is excluded from access to formal financial services (FACASI, 2015).

Other conditions for salary-based loans that deter smallholder farmers from accessing credit include the need for having banked with the prospective lender for 3 to 6 months, as well as the requirement for the account to have had regular inflows of money (FACASI, 2015). Most banks like FBC and Stanbic that offer salary-based loans target civil servants only, as well as particular companies on condition of a written undertaking from the employer for permanent employment for a given time (FACASI, 2015). By January 2019, loans to agriculture stood at 20%, whilst lending to individuals was comparatively higher at 25% (Figure 2; RBZ, 2019).

Figure 2: Banks' Sectoral Distribution of Loans: January 2019, Source: RBZ (2019)
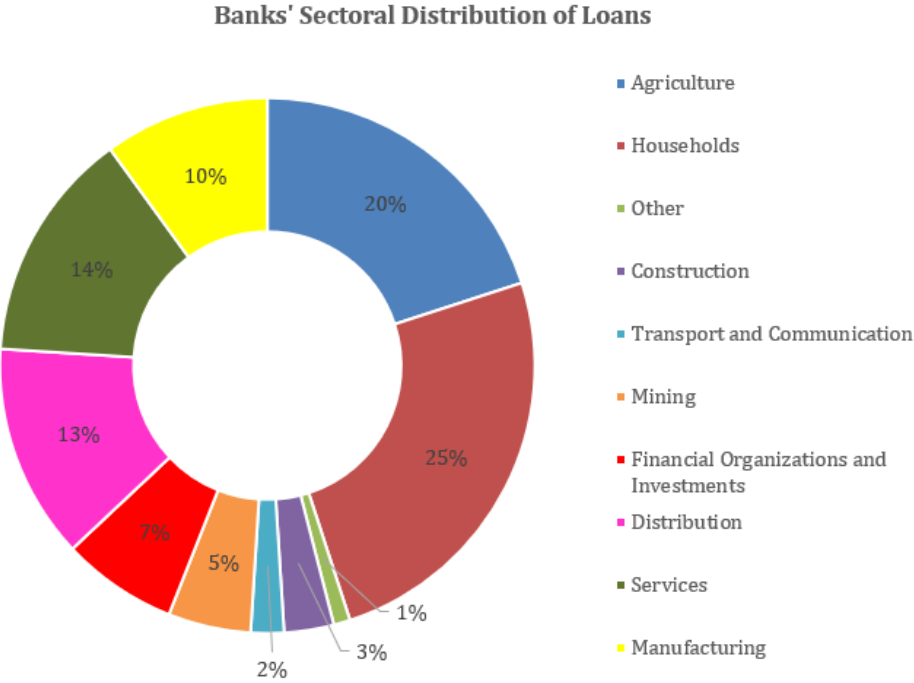
Banks also prefer to finance cash crop production. Nearly 60% of the funds availed to agriculture in the 2014/2015 season were channelled towards the financing of tobacco farming because of its high repayment rates (FACASI, 2015). Out of the US$326 million bank credit supplied by banks in the year 2010, 70% was supplied to 300 000-350 000 smallholder contract farmers of cotton and tobacco, yielding a possible US$223 million shortfall to the existing customer base, whilst only US$100 million credit was left to cater for the rest of the agricultural sectors (Vitoria *et al.*, 2012). The Zimbabwe Agricultural Development Trust (ZADT) (2017), which actively funds smallholder farming in Zimbabwe through the Credit for Agricultural Trade and Expansion (CREATE) fund that is mobilized through 13 banks, also reveals that 408 957 smallholder farmers accessed funding through value chain actors who are mostly tobacco contract farmers. This dominance of contract farming shows the banks' unwillingness to lend directly to farmers in order to minimize default risk and to reduce the loan administration costs of dealing with numerous farmers (Masiyandima *et al.*, 2011). However, these contracting companies have realized high loan recovery rates averaging more than 95% from the farmers despite charging interest rates that even exceed 60%, which is way above the rates that local commercial banks charge (Masiyandima *et al.*, 2011). This provides a sound basis for refuting agricultural sector specific risk claims that are at the forefront of most banks' justifications for not lending to the sector in Zimbabwe (Masiyandima *et al.*, 2011).

The short tenure of loans offered in most banks in Zimbabwe is unfavourable for the agricultural sector. The dominance of these short term loans is imputed to the fact that 93% of the deposits that local banks receive are subject to quick withdrawal (demand 60%; short-term 20%; savings 5% and long term 7%), which leads most of them to lend on a short term basis of less than 30 days (Ministry of Agriculture, 2013). The Finmark Trust (2014) confirms that banking in Zimbabwe is driven by transactional products that account for 81% of the total banking drivers. Deposits in the banking sector are short term and volatile in nature because approximately 90% of them relate to salary payments, thus making it difficult for the banks to provide the longer-term financing that is needed for infrastructure development, leasing, recapitalization and expansion projects without creating a serious funding mismatch (Vitoria *et al.*, 2012). Short term loans are unsuitable for agricultural products with long production periods. They are also inadequate for investments in the rehabilitation and development of productive infrastructure like machinery, equipment, vehicles, buildings, irrigation equipment, and for diverse financial requirements in agriculture (Makina, 2010; Ministry of Agriculture, 2013). In December 2016, demand deposits comprised 59.06% of total deposits (RBZ, 2016), and leapt to 79.71% by January 2019 (Figure 3; RBZ, 2019).

Figure 3: Composition of Money Supply by January 2019, Source: (RBZ, 2019)
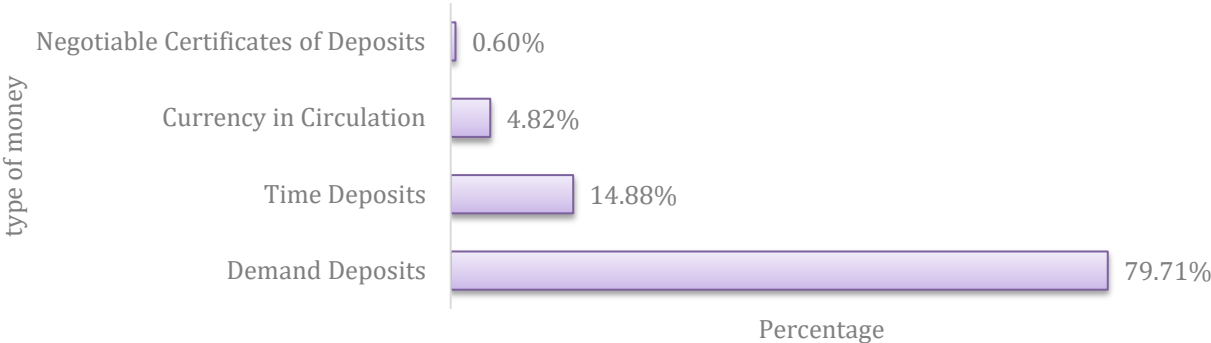
Short tenure loans that range from 30-90 days have a limited value to most smallholder farmers because they are more suitable for short term financing needs like trading and processing, and hence, they are unsuitable for most annual crop farming that has a cycle of at least 8-9 months from harvesting to marketing (Vitoria *et al.*, 2012). Short-term finance is also not suitable for crops like tea, coffee, sugar and tobacco that require longer financing periods, as well as for rural infrastructural development (Vitoria *et al.*, 2012). 90-180-day credit facilities are only reserved for highly collateralized farmers and agribusinesses, whilst limited finance is available for up to 270 days (Vitoria *et al.*, 2012). Interest rates charged by banks are prohibitive and only affordable to higher income earners (Vitoria *et al.*, 2012). 10-15% interest is charged on credit from offshore sources mainly to large and established customers, whilst 16-20% is charged on credit sourced from local banks using scarce local funds (Vitoria *et al.*, 2012). Such high costs of finance put bank finance out of reach of most small-scale farmers and rural enterprises that operate on small profit margins.

The liquidity constraints that are affecting the economy as a whole have also affected most banks' agricultural loan books, thus curtailing credit to the agricultural sector (Vitoria *et al.*, 2012). Bank services have also been limited in the smallholder farming sector because up until recently, banks have focused on serving large scale commercial farmers (Vitoria *et al.*, 2012). As a result, local banks have had little history of working with small holder farmers, and thus do not have an understanding of the market and structures to work with the sector.

3. Farmer Opportunities of Accessing Bank Credit in Zimbabwe

Farmer opportunities of accessing bank credit in Zimbabwe come in the form of government-initiated programs and policies that are aimed at enhancing the farmers' chances of accessing the crucial production input from formal banks. The most recent of these major policies that include the Collateral Registry, Command Agriculture and the 99 Year Lease Agreements are discussed further below.

The Collateral Registry: Micro, small and medium enterprises (MSMEs) and individuals in Zimbabwe fail to access credit markets to finance their businesses because they lack the immovable collateral that is demanded as security by banks despite being the major players in all the productive sectors of the economy (RBZ, 2013). The Government of Zimbabwe, in response to this challenge, took initiatives to establish a Collateral Registry for movable assets in order to expand the range of qualifying collateral accepted by banks. The Collateral Registry was enacted by the Parliament of Zimbabwe in 2017 under the Movable Property Security Interests Act (Chapter 14:35), but is however yet to be operationalized (Government of Zimbabwe [GoZ], 2017). A collateral registry is a publicly available database of interests in or ownership of movable assets. It allows borrowers to prove their creditworthiness, and lenders to assess their ranking priority in potential claims against particular collateral (RBZ, 2013). The main purpose of the collateral registry is to facilitate commerce, industry and other socio-economic activities by enabling individuals and businesses to utilize their movable property as collateral for credit (GoZ, 2017). Movable assets that can be used as collateral include equipment, inventory, accounts receivable, farm products, household items, fixtures, and bank accounts among others (Figure 4; GoZ, 2017).

Figure 4: How the Collateral Registry Works, Source: RBZ (2013)
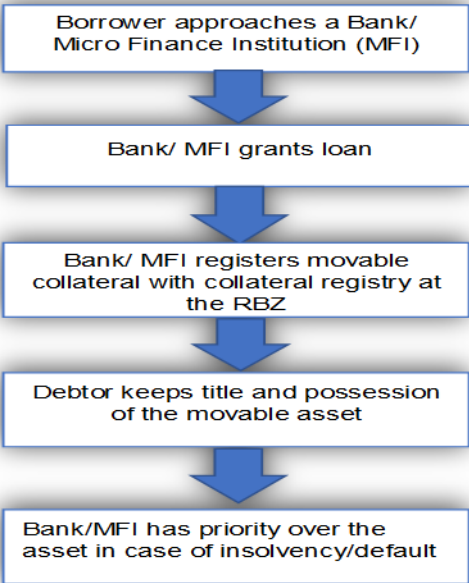
If the Collateral Registry is successfully operationalized and accepted by local banking institutions in Zimbabwe, it will present a huge opportunity for local farmers to access formal bank credit using their movable assets. However, this will only be an opportunity for those farmers who have better physical asset endowments.

Ninety-Nine Year Lease Agreements
Following the FTLRP, the government of Zimbabwe has been seeking to improve tenure security for the beneficiary farmers to allow them to use their landholdings as collateral to access finance for development and farming operations (Rukuni, 2012). As a result, 99 Year Lease agreements were drafted to address the collateral problem being faced by farmers. The 99 Year Lease is modelled on the existing 99 Year Leases issued by the Agricultural Land Settlement Board in terms of the Agricultural Land Settlement Act (Chapter 20:01) 1969 (Inter-Ministerial Task-Force (IMT) Technical Committee, 2016). Its main objective is to give tenure to medium and large scale farmers (IMT, 2016). The 99 Year Leases were also drafted in recognition of the 2013 Constitution of Zimbabwe's provision that the state cannot completely alienate its interest in land except through a Referendum (IMT, 2016). The lease is perceived as good as a full title deed given its tenure of ninety-nine years. The 99 Year Lease also stipulates that anyone who gets the lease has to pay for the improvements that are on the land over a 30-year period, whilst any improvements made by the lessee

thereafter accumulate and are subject to compensation by the government in the event that the lessee surrenders the lease (IMT, 2016). Despite being placed at par with a full title deed by its masterminds, the 99 Year Lease has attracted attention pertaining to its bankability, mainly from the banking fraternity.

The Bankers Association of Zimbabwe (BAZ) is concerned with ensuring that the 99 Year Lease is bankable (IMT, 2016). Another major concern is that the beneficiaries of the land reforms are unable to efficiently utilize their land due to lack of financing from the banking sector. Thus the bankability of the 99 Year Lease would contribute to improved liquidity levels in the economy and increased farm investments (IMT, 2016). However, according to Rukuni (2012), the 99 Year Lease Agreement is still inadequate for banking purposes. This is because the document gave all the powers and rights to the state, and a few to the farmer (Mutambara, 2016). The 99 Year Leases have also only been issued out to a few farmers who are all under the A2 model, and are also non-transferable to third parties as all the land is fully owned by the government (Bhatasara, 2011). This has resulted in its rejection by most banks. However, the government's formulation of this policy and its continued engagement with bankers on issues to be addressed to improve the bankability of the 99 Year Leases provide hope that opportunities of accessing bank credit by local farmers may be improved in the near future.

Command Agriculture: After the completion of the land allocation phase of the Land Reform Program in Zimbabwe, the government introduced the Command Agriculture program in partnership with the private sector (Ministry of Finance and Economic Development, 2017). The program was introduced in response to the perpetual deterioration of the country's food security status (World Bank, 2009). According to Echanove (2017), Command Agriculture is a government-mediated contract farming arrangement in which international and domestic capitalists work in collaboration with the local banks. Among its key objectives, the program sought to optimize output by requiring a certain minimum output for food or export crops, which was central to agricultural and the general economic recovery (RBZ, 2005). The Command Agriculture program was also based on the conviction that improvements in logistics would result in farmers acquiring their inputs on time, plant early and realize decent yields (World Bank, 2009). In the 2018 Budget Statement, the Ministry of Finance and Economic Development (2017) revealed that the thrust behind Command Agriculture was on the full, efficient and sustainable utilization of allocated land for increased investment on the land and production.

The main beneficiaries of the program included A2 farms and other influential politicians in the country (Echanove, 2017). More than US$2 billion was channelled to Command Agriculture through treasury bills (Shonhe, 2018). Sakunda Energy, which is owned by a Dutch commodities giant Trafigura through its South African subsidiary Puma Energy Africa Holdings, also invested in the Command Agriculture program. Consequently, a total of $487 million was raised, $334 million of which funded the program through coordination with three banks namely CBZ, Ecobank and Barclays (Shonhe, 2018). The RBZ (2018c) highlights that the total area planted under wheat was 34 142 hectares, of which 665 hectares were financed through the Command Agriculture program. As at 23 November 2017, recoveries from wheat farmers stood at US$3.6 million against a targeted US$8.8 million (Ministry of Finance and Economic Development, 2017). Moreover, out of the 50 000 contracted maize farmers under the program, 33% fully paid their loan obligations whilst 22% partially paid, reflecting the emergence of a positive culture of honouring loan obligations among farmers benefitting from the program (Ministry of Finance and Economic Development, 2017).

The government has instituted measures to enable recoveries from defaulting farmers through monitoring teams that were deployed to make follow ups to ensure that they acknowledge their debts for repayment in the next season (Ministry of Finance and Economic Development, 2017). The main shortfall of the Command Agriculture program is that it does not target the small-scale farmers who are not only the clear majority of the farmers, but also the ones in most need of support and whose food security situation is more fragile (Echanove, 2017). The command agriculture has however presented valuable opportunities for some local farmers to access bank credit from formal banking institutions. The focus on farmer production ability and the need for the farmers to honour their obligations timeously also help to instil a sense of responsibility and

accountability in local farmers. These qualities are indispensable for improving their future credit access prospects.

4. Conclusion

Zimbabwean farmers face several constraints that hinder them from accessing formal bank credit. Collateral is the leading cause of the farmers' failure to access bank credit because most of them lack the preferred form of collateral by banks, which is in the form of immovable, titled property. Other minor causes of the rejection of agricultural loan applications by local banks include the farmers' poor past performance, poor past loan record and the lack of farmers' own contribution to the loan amount requested. The land offer letters that most farmers, especially smallholder farmers hold, are totally not recognized by formal lending institutions.

Weather risks, particularly the dependence of Zimbabwean agriculture on rainfed agriculture and its vulnerability to droughts repel lenders from investing in the sector. The volatility of agricultural produce's market prices also makes banks unwilling to lend to the agricultural sector. Political interferences by the local government in loan administration by banks to local farmers have led to the failure of several farmer financing programs, and also left a culture of non-repayment among farmers that is completely detested by any lender. This has dealt another blow on the local farmers as banks have become increasingly wary of lending to the agricultural sector as evidenced by their agricultural loan portfolios that are mostly below the 20% threshold recommended by the local monetary authorities. Persistent harsh economic conditions in the country have also inculcated certain behaviours in local banks that act as barriers to credit access by farmers. For example, interest rates are high and beyond the reach of most farmers, there is a bias towards consumptive lending to salaried individuals and cash crops that are perceived as less risky. Moreover, due to the dominance of demand deposits in the local financial system's deposits base, advanced loans are usually short term in nature, and thus unsuitable for agricultural production and other crucial investments that need longer term financial investments. The Zimbabwean government has consequently formulated policies like the Collateral Registry, 99 Year Lease Agreements and Command Agriculture, which if successfully and impartially implemented, may present immense opportunities of credit access to local farmers.

5. Recommendations

In light of the literature reviewed in this study on the local farmers' constraints and opportunities of accessing bank credit, we prescribe the following to various stakeholders.

The Government of Zimbabwe
- As noted in the study that Zimbabwean agriculture highly depends on rainfed agriculture, it is pertinent for the government to prioritize the development of irrigation infrastructure in resettlement farms. This will act as a risk reduction mechanism in the sector, and thus attract financial investments from banks.
- The study has also noted that besides collateral, other agricultural loan applications are rejected on the basis of poor past performance. Hence, the government through its agricultural extensions arm Agritex should formulate educational campaigns on better farm management processes and methods to enhance productivity and overall farm performance that attract financial investments.
- It has also been observed in the study that land offer letters that most farmers hold as proof of farm ownership are not recognized in local banking institutions. Hence, there is a need to address the issue of land ownership and its transferability to third parties in order to ensure the farmers' better access to the crucial bank credit.
- The government should enforce a culture of accountability in its farmer financing programs, and also avoid interferences in programs that it implements through the formal financial system. This will instil a sense of responsibility in local farmers when it comes to honouring their loan obligations, a quality that can immensely improve their creditworthiness in the eyes of private lenders like banks.
- Efforts to amend ties with the foreign community should be made by the government in order to attract longer term and cheaper offshore investments in the financial sector. This is imperative because prevailing liquidity constraints in the country do not allow local individuals and corporates

to make adequate long-term investments in the formal financial system. Hence, replenishment from foreign sources of finance is needed.

- The restoration of stability in monetary and fiscal authority regulation and policy formulations should be upheld in order to restore confidence in the national financial system. This is also needed for attracting both domestic and foreign long-term financial investments that can then be advanced as loans to deficit units like agriculture.

Banking Institutions

- Educational campaigns to the government and the farming community on other requirements of credit access besides collateral should be done so as to ensure that remedial actions by both the government and farmers are not solely focused on collateral, but also on other crucial credit access requirements.
- Given the collateral problem that the local farmers are facing due to the insecurity of tenure and the banks' use of traditional lending models in ascertaining borrower creditworthiness customized to their own requirements, banks need to develop locally adaptive models for the agricultural sector clientele. Instead of demanding upfront collateral in the agricultural sector, they may consider capacity as a leading factor in loan appraisals so that potentially profitable farming projects are not denied credit access because of their failure to avail collateral (Nyamutowa & Masunda, 2013). This recommendation is supported by Agyemang (1987) who advises that regardless of the importance assigned to the request for collateral during the loan appraisal process, its requirement by banks must be done cautiously because it is capable of being counterproductive. Moreover, Akakpo (1994) avows that during the loan appraisal process, the request for security should be the last consideration, and credit should not be granted just because the borrower provided security, but should only provide cushioning should the borrower default repayment. Hence, in line with Osei-Nyarko (2015), we propose that the strictness in demanding total secured collateral before the disbursement of credit facilities needs to be relaxed.

Local Farmers

- In light of the provided background that local farmers inherited untitled land with limited development, and also personally lack experience, knowhow and passion in farming (Richardson, 2005), this study proposes the adoption of capital formation by these farmers so that they improve the physical, human and social capital facets of their farming enterprises in order to improve their access bank credit. In view of Clauses 6.1 and 22 of the 99 Year Lease Agreement, which stipulate that the value to be leveraged on as collateral by banks and farmers will be derived from the developments on the land not the land itself, physical capital formation is highly imperative in local farms to ensure access to credit even though this is highly dependent on the bankers' acceptance of the condition.
- Local farmers should participate in the formal financial system by ensuring that they at least have a bank account to their name, through which they institute their farm business and personal transactions. This will help to ensure that they create a relationship with the bankers, create a good reputation for themselves and fulfil one of the basic requirements by local banks of having banked with a bank for more than three months in order to access bank credit.

Academics

- The study recommends a study on the application of various bank lending models in local banks in the agricultural sector because sparse literature exists in that area.
- We also recommend a study on the adoption of alternative financing tools in the Zimbabwean agricultural sector besides the widely documented contract farming, micro finance and bank credit. Such financing tools include warehouse receipting, leasing, invoice financing and insurance just to name a few.

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Paper 7

The impact of leadership styles on organizational performance: A case of the Master of Business Administration at the University of KwaZulu-Natal

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Abstract: Many contemporary private and public enterprises have been hit by scandals and underperformance, which have been linked to organizational leadership. The study focused on MBA year three students at the University of KwaZulu-Natal. The assumption has been that since these are masters' students, they have once been exposed to various leadership styles, some of them are leaders, all have studied leadership styles and therefore likely to understand how these styles impact on organizational performance. This is a quantitative study. The total population was 140 students of which a total of 100 were targeted. Simple random sampling was used. Most of the participants revealed that there is a significant link between leadership styles and organizational performance. They unanimously agreed that there is definitely a noteworthy relationship between leadership styles and the organizational performance. The respondents also revealed that transformational leadership style is the most complimentary leadership style to organizational performance followed by strategic and open leadership styles respectively. Participants agreed that toxic leadership style and autocratic leadership style are undermining the organizational performance. It is important to synchronize new leader placements with organizational goals to ensure synergy between the leader and organizational goals.

Keywords: *Leadership styles, organizational performance, university*

1. Introduction

The success of organizations and most businesses, both small and large, is predicated on the quality and ability of the leadership styles possessed by leaders in such organizations and businesses. The recent organizational scandals in South Africa such as those of Eskom, the South African Broadcasting Corporation (SABC) and the South African Airways (SAA) have all been linked to the nature of leadership, which ran those institutions. Classic examples include the Enron which collapsed in the 1990s due to incapable leadership (Cui & Hu, 2012; *Fakhar, et al.* 2012; Mitja & Suzana, 2012). Steinhoff narrative also resembles that of Enron. These scandals have presented proof that organizations continue to lay victims of a leadership failing to demonstrate capability. Research unveils that many leaders within these organizations understand the benefits that may be accrued when strong, open as well as well-articulated leadership styles are put in place (Cui & Hu, 2012; Fakhar *et al.*, 2012). The study is motivated by the continued need for improved leadership in organizations, not only in South Africa, but across the world. The New Partnership for Africa's Development (NEPAD, 2001) framework denoted that the poverty and backwardness of the African continent stands in severe contrast to the success of the industrialized countries/economies. In the context of Africa, this challenge has been linked to the ability of organizational leadership. It is argued that the individuals who are given the responsibility to steer organizations to profitability simply do not have the ability to do so. Rwelamila and Ssegawa (2014) traced this incapability back to the training institutions where managers or leaders are produced in order to establish whether competent managers were being produced. These authors adopted the findings of a previous study that identified project management themes as critical for inclusion in the curriculum of graduate programmes. These scholars found that most of the programmes offered in institutions lacked an adequate exploitation of the so-called "soft issues" relating to leadership or management. This study therefore intends to emphasize that having a competent leadership in organizations starts with the development of suitable/appropriate inputs to the training process.

The study focuses on the impact of leadership style(s) on organizational performance. The study seeks to find out the impact that leadership style(s) have on the performance of the organization. For instance, the study seeks to establish whether an organization can fail to achieve its primary objectives just because the leadership style is not conducive for the organization.

In a context such as the post-1994 South Africa where most companies are faced with inevitable organizational issues related to transformation and profitability, an understanding of suitable leadership styles is highly imperative. The failures of public enterprises such as Eskom, the South African Broadcasting Corporation (SABC) and the South African Airways (SAA) are only a few examples of how organizational leadership can impact on the total performance of an institution. A study is therefore important to enable researchers to identify factors that make many organizations fail in terms of their overall performance and transformation efforts. The outstanding characteristic of the South African environment is that its terms evolves and procreate/reproduce itself along racial and ethnic lines, which were prompted in large measure by deliberate state policy (Govender, *et al.,* 2005). It is crucial for that reason to acknowledge that the leadership styles adopted in most South African organizations are very linked to the history of colonialism and apartheid.

2. Theoretical Framework

The Concept of Organizational Performance: Various researchers have differing views about performance. The theory of performance refers to the level of achievement of the mission within an organization (Cascio, 2006). In most occasions, researchers use the term performance to communicate the range of measurements of transactional efficiency and input and output efficiency (Fakhar, *et al.,* 2012). Suar and Khuntia (2010) posited that performance is a continuous process that has raised deep-seated controversy among organizational researchers. Chummun (2019) stated that the performance of an organization lies in effectively promoting low-income products to encourage social progress and micro entrepreneurship. Esra, *et al.* (2011) posited that organizational performance entails the organization's capacity, ability to achieve its goals effectively and efficiently using resources that are at the disposal of the organization. In addition, Kreitner and Kinicki (2010) argued that the realization of the goals and objectives of organizations what is termed an organizational performance. Kreitner and Kinicki (2010) suggested that organizational success shows high return on equity and this becomes possible due to establishment of good employees performance management system.

Leadership and Organizational Performance: Important organizational aspects such as corporate values are also been linked to the quality of leadership in a particular organization and the values this leadership represents. Leadership is so important in implementing organizational strategies that are linked and support the corporate values of a specific organization. Leaders are required to possess certain in-built capabilities and values in order for them to be able to execute their roles. Strategic thinking process incorporates the ability to define problems, provide a diagnosis and to stand up for a particular set of values. The leader can thus use cognitive complexity to achieve what is expected (Louw & Venter, 2010).

Leadership Roles: Effective leaders possess high amount of emotional intelligence. This makes it easy for them to manage themselves and others. Successful leaders are self-aware, they are self-regulatory, able to keep others motivated, show empathy to others and have great social skills. Emotional intelligence is a necessity that enables the leaders to behave appropriately in different situations including confrontational situations (Louw& Venter, 2010). Organizational values should be clearly defined as they define the culture of the organization and guide behaviour (Louw& Venter, 2010). The human resources office is the key in implementing strategies that are promoting corporate values. It is the duty of this office to articulate the right set of behaviour and set of skills and also appropriately place them where they are required.

Toxic Leadership and Organizational Performance: Judge, *et al.* (2009) describe toxic leadership as one of the most destructive type of leadership with a high potential to bring an organization to its knees. This type of leadership can create dysfunctional personality qualities in employees and hence consequently undermine the performance of organizations. Toxic leadership has serious and poisonous effects on subordinates. Toxic

leaders believe that inflicting fear will help the organization achieve more. Its additional negative effects may include the production of highly inefficient teams, increased personnel transfer or staff turnover, absenteeism, low levels of satisfaction (Mehta & Maheswari, 2013 cited in Yavas, 2016). Toxic leadership is as a result of mean spirited, arrogant and dictatorial tendencies and an inability to share credits (Maull, 2017).

Transformational Leadership and Organizational Performance
Another popular leadership style is the transformative one. Chong, *et al.* (2016) submit that transformational leaders are those who are charismatic and inspiring to their subordinates. These kinds of leaders possess great influence, inspire deep loyalty to the organization, command respect and are visionary. Previous years of research acknowledge that this leadership style is capable of influencing the organization's priorities in terms of implementing the organizational formal control systems (Abernethy, Bouwens & Vincent, 2010 cited in Chong *et al.*, 2016). Chong *et al.* (2016), state that transformational leadership style is complimentary to managerial performance as well as detailed performance management systems. Transformational leaders inspire their subordinates to take ownership of the organizational goals and, hence their followers reach their highest levels of performance (Burns, 1978 cited in Chong *et al.,* 2016).

Theory X and Y Leadership and Organizational Performance
Leadership styles have been in the forefront of the research over the years. However, theory X and theory Y and its impact on performance in the organization have relatively less information being researched (Arslan & Staub, 2013). Theory X assumes that employees are lazy, do not want to work and therefore must be compelled and be threatened with punishment. Theory Y posits that workers are all about the organization and will always look for responsibility and that they always apply self-control (McGregor, 1960 cited in Arslan & Staub, 2013).

Transactional Leadership and Organizational Performance
A transactional leader is a leader who works within existing organizational frameworks to satisfy the needs/desires of his/her followers by focusing on aspects like contingent rewards, attention to detail, to deviations, mistakes or irregularity and who makes corrective moves or adjustments (Ertosun, *et al* 2011). It refers to the exchanges happening between the leaders and subordinates (Price, 2009 cited in Aigbavboa, Luphadzi & Thwala, 2015). It is a motivation process whereby leaders achieve their goals, and subordinates receive rewarding for a job well done. An example of this kind of a leader is the one who offer rewards, namely, promotions, extra pay, time off duty, for people/subordinates who exceed their set goals.

Strategic Leadership and Organizational Performance
Strategic leadership is a procedure of influencing employees in a company with the intention of changing behaviour so as to realize set goals (Johnson, *et al.* 2012). Leadership plays an important part in implementation of strategy. The 'term' strategic leadership is defined by Hitt, *et al.* (2007) as the leader's ability to forecast, foresee, and sustain elasticity and to empower others to generate strategic transformation as required. Strategic leadership has numerous intentions. It involves among other things managing through others, and helps organizations to survive changes in a globalized business atmosphere.

Servant Leadership and Organizational Performance
The servant leadership style is an emerging approach to leadership. These are leaders who want to serve. According to Gumus, Atan, *et al.* (2011), when a leader is observed as a servant first, that same leader is a servant leader. Bass (1990) cited in Gumus et al. (2011) state that the main difference between the transformational leader and servant leader are the intentions of the leader. A servant leader depicts more altruism motives. This is the ability to put away self-interests so that others can benefit (Green leaf, 1970 cited in Gumus, 2011).

Open Leadership and Organizational Performance
Open leadership allows employers to share leadership roles with the employees; hence the organization will have the most empowered employees. In cases like these skills can be easily replaced in case of sickness, retirement or resignation (Bulbul *et al.*, 2015).

Charismatic and Democratic Leadership and Organizational Performance
Charismatic leadership is the ability to fire up the followers' energy and commitment to the task. It has a potential to produce results that are beyond the call of duty (Price, 2009 cited in Aigbavboa *et al.*, 2015). This type of leadership creates similarity/commonness between the employee's culture and values to that of the organization. Democratic leadership creates a direction and enables the group to make its own decisions. A democratic leader creates an environment that allows co-creation and has a sample of all ideas at hand (Surdek, 2016).

Laissez-faire, Autocratic Leadership and Organizational Performance
With the laissez-faire leadership (Boonyachai, 2011 cited in Aigbavboa *et al.*, 2015) the group develops its own decisions, leader has no authority, only answers questions, provides information needed, as well as the re-enforcement to the group. Followers seek other sources of information to support their final decision-making. With authoritarian leadership opposite to laissez-faire and democratic leadership also referred to as autocratic leadership, a leader gives a clear definition of what is to be done, when, and how it should be done. This is a military style of leadership (Aigbavboa *et al.*, 2015). Not every leadership style has a potential to add value to the organization depending on its appropriateness for the environment, and whether creates the misalignment to the organization's goals (Aigbavboa *et al.*, 2015).

Leadership and Performance Measurement
The more detailed the performance measurement system is, the easier the overall oversight of the organizational activities are. This makes it easier and gives managers the total control of the organization (Chong *et al.*, 2016). It becomes very easy for managers to validate their beliefs, perceptions and observations in the organization through the comprehensive/detailed performance measurement system (Chong, 2013). Detailed performance management systems broaden the scope of accounting information that is available for managers.

Leadership and Corporate Social Investment
Innovative performance in organizations is derived from a good social capital. Social capital is an ability by an organization to invest in its social capital (society/humans/employees) working for the organization. This initiative assists organizational information to be shared amongst the employees and hence facilitate performance. In this regard, an organization cannot miss the opportunities presented by the environment (Ardabili & Golmoradi, 2016). Today; organizations need to be up to date about the knowledge of their environment.

Ethics and Leadership
In leadership, it is very important to stick to ethics. This to what is good to do or what is the right thing or correct thing to do in a particular circumstance (Ozbag, 2016). Ethical leaders look at what is the moral standard to take, and the moral standard to set for employees including the leaders. There is no shifting of the goal post when ethical standards need to be followed (Kohlberg, 1984 cited in Ozbag, 2016). Brown and Trevino (2005) cited in Ozbag (2016), state that ethical leadership has two important dimensions; moral standing, honesty, integrity as well trustworthiness. Secondly, ethical leaders influence others to do the right thing. Ethical leaders are defined as honest, caring and principled individuals who always want fairness to prevail (Ozbag, 2016).

Authenticity, Information sharing, Innovation and Leadership
Authentic leaders help their subordinates to find a connection to relate meaningfully in the organization and its processes..Avolio and Gardner (2005) cited in Dhar *et al.* (2016) share some very interesting insight on authentic leadership, they argue that this type of leadership builds up the psychological being of followers (subordinates), confidence, optimism, hope and resilience. Too often people tend to affirm their strengths and ignore their weaknesses (Cashman, 2017).

Leadership and Change
Leadership and change requires the active role of firms to be aware of opportunities and implement strategy accordingly (Lee & Malerba, 2017 cited in Vertesy 2017). Such strategies include the learning capacity, capability and innovation (Lee & Lim, 2001; Mu & Lee, 2005 cited in Vertesy, 2017).

Leadership and Emotional Intelligence
Drimoussis and Trivellas (2013) consider traits like, behaviour and emotional intelligence as the critical competencies for leadership. It suggests that certain competency profiles are appropriate for particular situations (Trivellas & Drimoussis, 2013). Leadership need not only use rationale. However, it needs to be able to connect physically, emotionally and spiritually with the subordinates. McClelland (1998) cited in Mihic, *et al.* (2013) found that the desire for achieving, developing other people, adapting, ability to influence, confidence to yourself and leadership are important factors that differentiate between best and average managers. Chen, Jacobs and Spencer (1998) cited in Mihic *et al.* (2013) state that emotional skill is far more important than the organization that is infested with intellect and technical skill. Goleman (2001) cited in Mihic *et al.* (2013) posit that emotional intelligence affords self-awareness, self-regulation, social-self conscience and relations management.

It is also well recognized in literature that emotional intelligence is as important as intelligence quality in an individual's progressiveness, especially when interacting with others (Druskat & Wolf, 2001 cited in Chatterjee & Kulakli, 2015).

Leadership and Culture
Stephan and Pathak (2016) investigate more deeply into cultural leadership ideal and entrepreneurship. Stephan and Pathak (2016) try to find a reason as to what exactly drives the culture of entrepreneurship. Tung, Walls and Frese (2007) cited in Stephan and Pathak (2016) state that what drives the entrepreneurial leadership is strong the cultural values within a particular society. Thus, the issue of culture can be extrapolated into the success of leadership in the organization. This means that the culture that the organization adopts has an influence on how successful the organization becomes. Culture cannot be ignored when talking about leadership styles. In addition, values and norms of the society will need to be taken into consideration. For an instance, in a context like South Africa where there are multiple ethnicities, it is very important to take into consideration the various cultures that accompany these various ethnicities. It is very important for a leader in South Africa to have an open-minded approach when it comes to cultural values and to promote co-existence within members of the organization without any one of them being offended.

Leadership and Personal Needs
Jooste and Hamani (2017) are touching on important aspect of leadership "motivational needs". A leader must also have a need to lead; it makes it more beneficial for the organization. McClelland argues about the need for Power, Affiliation and achievement. That need is even more important because that indicates that the person has a desire to influence others (McClelland & Burnham, 2003 cited in Jooste & Hamani, 2017). Maslow's hierarchy of needs cited in Judge *et al.* (2009) posits that when leader is trusted with the role to lead, he/she must be at the level where they are ready to lead. This will help synchronize personal needs to leadership responsibility and hence create synergy.

Leadership, Strategy and Negotiation
Instead of looking/searching for a great leader, it is important to look for greatness in all of the people in the organization. The organization must create the modern culture of learning (Mazdai & Mohammadi, 2012). When managing projects, it is important to ensure that the management has the buy in of subordinates especially when it comes to issues associated with changes (Kotter, 1996 cited in Mihic *et al.*, 2013). There has been a shift by global companies to a differentiated approach (Octavia, Semuel & Siagian, 2017). Kotter and Armstrong (2003) state that differentiated strategy means meaningful difference between the company offerings and that of the competition (Octavia *et al.*, 2017). Organizations that consider differentiation as their strategy are those that are considering first entry into a new market. Leadership styles of a project manager can influence the project success (Aga, 2016). Aga (2016) identifies this as a critical success factor. The leadership of organizations needs to understand that it does not exist in a shell but have an insight in all other

aspects of local, national and international forces (Hickman, 2010). Negotiation is a very important leadership tool when it comes to issues like conflicts (Zohar, 2015).

Leadership, Motivation and Performance
Contemporary leaders are faced with much challenging circumstances than ever before (Alpkan, *et al.*, 2016). They need to deal with the fast-changing business environments, unstable economic climate, capable competition, catching up with fast moving technological advancements, and are exposed to international competition (Alpkan *et al.*, 2016). Leaders need to accept all situations objectively not only to accept those that are self-validating. These kinds of leaders have a tendency to support their subordinates. They are also most likely to generate positive outcomes for the organization (Dwerk & Legget, 1988; Illies, 2005 citted in Alpkan et al, 2016).

The performance of the staff in organizations has over time proved itself as key to organizational success. Thus, it is important for every leader to try enhancing the performance of employees (Mousakhani, Alvani, Mirza & Muhammadi, 2012 cited in Ebrahimmi, Moosavi & Chirani, 2016). Seven essentials of leadership by Dean (2006) are the ability to listen to learn, empathize with emotions, attend to aspirations, diagnose and detail, engage for good ends, respond with respectfulness, speak with specificity.

The Proposed interrogative model

Research Sub-Questions
The impact of leadership styles on organizational performance on MBA year three students at the University of KwaZulu-Natal
The following secondary research questions are set for the study:
- What are the participants' understanding of leadership styles in enhancing organizational performance?
- What are the attitudes and perceptions of participants with regards to leadership styles?
- How can potential leaders be assisted in identifying the areas that may be a source of weakness in their leadership attributes?
- What leadership styles can be recommended to potential future leaders?

Objectives of the study
The main objective of the study is to investigate the impact that leadership style(s) have on organizational performance. To achieve this objective, the following secondary objectives are set:
- To determine the participants understanding of leadership styles in enhancing organizational performance
- To investigate the attitudes and perceptions of participants with regards to leadership styles and organizational performance
- To assist potential leaders in identifying the areas that may be a source of weakness in the leadership attributes and organizational performance, and
- To recommend the leadership styles that may boost organizational performance.

3. Methodology

The adopted is the positivist paradigm in an exploratory and explanatory research designs. This paradigm is based on the philosophy that is traceable to Aristotle, Francis Bacon, John Locke, August Comte, and Emmanuel Kant (Babbie, 2011) and "reflects a deterministic philosophy in which causes probably determine effects or outcomes" (Creswell, 2014). The positivism anchors on the values of reason, truth and validity and an emphasis on facts obtained through direct inspection and experiment and empirically measured through quantitative methods and statistical analysis.

Design, target population and Sample
The target population of the study was defined as all the 140 MBA year three students (class of 2017) at the University of KwaZulu-Natal. These students had an equal chance to participate in the study. This study

focused on the MBA year three students (Class of 2017) at UKZN Graduate School of Business and Leadership. Sampling is the practice used by researchers to make decisions with regard to the people, places, or things to study (Siririka, 2007). The study adopted simple random sampling in order to give everyone a chance to participate. The reasons for choosing these participants/respondents were as follows: MBA year three students were chosen because there was an "assurance" that they understood the leadership style(s) or theories better because they have studied about them. Some are leaders, others are being lead in their respective organizations.

Questionnaire (Instrument Construct)

The design was constructed based on review on many other different research designs, and the one that is in this report was found to be more relevant for this design. Reason being that this is the practical information in the field of leadership measured against what theory says (Creswell, 2014) and Saunders *et al.* (2013) also agree with this. Questionnaire is predominantly Likert type scale, which is mainly used for quantitative study (Cooper, 1976). Cooper (1976) posits that Rensis Likert created the Likert scale in year 1932. Sekaran and Bougie (2013) define data collection as a thoroughly prepared plan or technique used to collect data from participants. The data was collected through online software called "Questionpro" which is accessible at: *www.questionpro.com*. This software makes it easy to create questionnaire. The researcher only needs to get the emails of participants and email the questionnaires to the participants. Rowley (2014) states that questionnaire is a preferred way or method of collecting data in a quantitative study. Data analysis is the procedure whereby researchers gain an understanding of the information they will have collected during fieldwork. In data collection, information is usually scattered across the many different instruments that the researcher will have made use of. The analysis process therefore gives the researcher an opportunity to make sense of the data and also to present it (Creswell, 2014).

4. Research Results and Analyses

Table 1: Validity and Reliability (Cronbach's Alpha for the study)

Reliability Statistics	
Cronbach's Alpha	**No. of Items**
0.702	9

Table 4.8 shows the Cronbach's alpha of 0.702 which means according to Babbie (2011); Gliem & Gliem (2003) as well as Heale & Twycross (2015), this value of Cronbach's alpha is good. This means that the research instrument (questionnaire) has a good degree of reliability and internal consistency. It is worth to mention that the questionnaire was created with caution that the questionnaire should not be long in a manner that discourages the respondents from participating in the study. Lengthy surveys are known for discouraging participants from answering questionnaire (Sears and Jacko, 2009). However, it is clear that this did not compromise the reliability, validity and the integrity of research instrument, hence a good Cronbach's Alpha coefficient. Bindak (2013) posits that when a number of items is increased Cronbach's alpha tends to increase as well. Meaning had there been higher number of items, Cronbach's alpha would have been high as well.

Collected Data from Participants

Question 1: Do Leadership styles have impact on organizational performance?

97% of participants agreed. 3% of participants disagreed.

Question 2: Are leadership styles applied by a leader in an organization capable of influencing the performance of subordinates?

4.48% of participants strongly agree, another 4.48% sees no link. 34.33% agree and 56.72% strongly agree.

Question 3: Organizational failures are because of leadership style(s) that the leader of an organization applies or use?

1.52% strongly disagree, 10.61% disagree, 15.1% strongly agree, 51.52% Agree and 21.21% sees no link.

Question 4: Which of the following leadership style(s) do you consider as the best for the organization to be successful?

35.65% say, Transformational, 21.74% said Strategic leadership, 20.87% said Open leadership, 10.43% said Democratic, 0% said Toxic, 1.74% said Autocratic, 1.74% said Theory X, 4.35% said Theory Y, and 3.48% said other.

***Other** refers to Servant leadership style and Situational leadership style.

Question 5: Which leadership style(s) do you view as the best on the above list in Q4?

12.7% said Strategic, 52.38% said Transformational, 6.35% said Democratic, 11.11% said Open, 4.76% said Transformational & Strategic, 3.18% said Transformational, Strategic & open, 1.59% said Servant, 1.59% said Transformational & Open, 1.59% said Theory X, 1.59% said Theory Y, 1.59% said Transformational, Strategic & Democratic and 1.59% said it depends on a situation.

Question 6: Which leadership style(s) do you think will work better if possessed by leader in an organization?

8.2% said Transformational & Strategic, 18.03% said Strategic, 36.07% said Transformational, 8.2% said Open, 9.84% said Democratic, 1.64% said Toxic, 3.28% said Servant, 3.28% said Theory Y, 1.64% said Transformational & Open, 1.64% said Theory X, 1.64% said Transformational, Democratic & open and 6.46% said it depends on a situation.

Question 7: Which leadership style(s) in Q4 above do you think any organizational leader should not possess them?

26.98% said Autocratic, 55.56% said Toxic, 1.59% said Toxic Autocratic & Theory X, 1.59% said Toxic and Transformational, 1.59% said Democratic, 3.18% said Transformational, 1.59% said Theory X & Autocratic, 4.76% said Toxic & Autocratic, 1.59% said Theory Y and 1.59% said it depends on a situation.

Question 8: Is organizational success because of leadership styles(s) in the organization?

35.38% strongly agree, 49.23% agree, 9.23% see no link, 6.15% disagree and none strongly disagree.

Question 9: Have you lived or been exposed to any leader who possesses one or more of the leadership styles in Q4 above?

21.69% only learnt, 24.10% Learnt and lived and 54.22% Learnt and exposed.

Question 10: Among the leadership styles mentioned in Q4 above, which combination of leadership styles, do you regard as the best for a leader when he/she possesses?

10% said Open & Strategic, 6.67% said Transformational, 8.33% said Transformational, Strategic & Open, 33.3% Transformational & Strategic, 11.67% said Transformational & Democratic, 6.67% said Transformational & Open, 1.67% said Transformational, Strategic & Democratic, 5.00% said Transformational, Democratic & Open, 1.67% said Transformational, Strategic, Open & Democratic, 1.67% said Transformational, Theory Y & Strategic, 1.67% said Transformational & Autocratic, 1.67% said Open, 1.67% said Strategic, 1.67% said Democratic & Strategic, 3.33% said Democratic & Open, 1.67% said Democratic & Theory Y, 1.67% said it Depends on a situation.

Question11: Age group of participants.

70.49% of participants are between (30-40) years, 4.92 % of participants are between (20-30) years, 21.31% are between (40-50) years old and 3.28% is above 50 years of age.

Analyses

The study revealed the success of any organization rests on its leadership. Good leadership can easily translate into organizational success. A total of 97 percent of the participants concurred that the leadership style used in the organization had a very important bearing on the organization's performance. Only about three percent of the participants did not recognize the impact of leadership on the total performance of the organization. This finding is consistent with the analysis of Parasuraman (1990) who argued that leadership is the key to organizational success. Objectively, leadership style should be closely related to delivery of services. Reviewed literature had linked organizational failure to the kind and nature of leadership styles exhibited in organizations (Alpkan et al, 2016). In the current study, 15.15 percent strongly agreed that most organizations were failing because of leadership. An additional 51.52 percent of the participants simply agreed (see Chapter Four). This implies that more than 65 percent of respondents agree that leadership styles have influence on organizational failures. Transformative leadership has a remarkable impact and good performance in managing employees (Chong *et al.*, 2016). In this study, a total of 35.65 percent of the participants confirmed that transformational leadership was likely to produce better results for organizations. Some participants in the study however chose different leadership styles than transformational leadership style. A total of 21.74 of the participants regarded strategic leadership as the

best, 20.87 percent considered open leadership as the most important while democratic leadership was considered as the solution by 10.43 percent of the participants. Only a total of 4.35 percent considered Theory X as important. Respondents who preferred democratic, open and strategic leadership pointed that the openness of the leader is very important because every member feels involved and part of decision-making. In a way, it makes them feel like they own the organization as well.

Judge *et al.* (2009) describe toxic leadership as one of the most destructive type of leadership with a high potential to bring an organization to its knees. The participants' responses agree with this statement. A total of 55.55 percent of the participants pointed out that toxic leadership was the most undesirable in organizations. About 26.98 percent mentioned autocratic leadership as the most undesirable. A total of 4.76 percent viewed a combination of the two styles as the worst.

5. Research Implications, Limitations and Directions for further Research

Theoretical Implications
The study revealed the success of any organization rests on its leadership. Good leadership can easily translate into organizational success. A total of 97 percent of the participants concurred that the leadership style used in the organization had a very important bearing on the organization's performance. Only about three percent of the participants did not recognize the impact of leadership on the total performance of the organization. Reviewed literature had linked organizational failure to the kind and nature of leadership styles exhibited in organizations (see Alpkan *et al.*, 2016). It has been found that contemporary leadership needs to deal with the fast changing business environments, unstable economic climate, capable competition, catching up with fast moving technological advancements (Alpkan *et al.*, 2016) in order for them to be able to generate positive outcomes for the organization (Dwerk and Legget, 1988; Illies, 2005 cited in Alpkan *et al.*, 2016). In the current study, 15.15 percent strongly agreed that most organizations were failing because of leadership. An additional 51.52 percent of the participants simply agreed. This implies that more than 65 percent of respondents agree that leadership styles have influence on organizational failures.

In the study, the author experienced some predictable and unforeseeable problems which were however dealt with carefully so as to not undermine the findings of the study. These challenges were related to the attitudes of participants (e.g. all 140 participants opened the survey however, only 66 responded positively), the research instrument and time available for conducting the study. Even though there is an abundance of literature discussing leadership styles, however, there is lesser literature linking leadership styles to organizational performance. The literature review indicated that leadership styles do not produce the same results. Other styles are more effective in the growth of business while others are destructive. Chong, Winata, Mia and Nguyen (2016) argue that transformational leadership styles are likely to achieve better results for organizations. In this study, a total of 35.65 percent of the participants confirmed that transformational leadership was likely to produce better results for organizations.

Previous years of research acknowledge that this leadership style is capable of influencing the organization's priorities in terms of implementing the organizational formal control systems (Abernethy, Bouwens & Vincent, 2010 cited in Chong *et al.*, 2016). Chong *et al.* (2016) found a direct link between transformational leadership and organizational performance. Transformational leaders inspire their subordinates to take ownership of the organizational goals and, hence their followers reach their highest levels of performance (Burns, 1978 cited in Chong *et al.*, 2016).

Pearce, Ensley and Hmieleski (2003) cited in Chong *et al.* (2016) state that under a transformational leader, subordinates stay motivated and wanting to achieve organizational goals irrespective of whether there is a reward attached to it or not. Some participants in the study however disputed this argument. A total of 21.74 of the participants regarded strategic leadership as the best, 20.87 percent considered open leadership as the most important while democratic leadership was considered as the solution by 10.43 percent of the participants. Only a total of 4.35 percent considered Theory X as important. When respondents were asked to rate the types of leadership styles, a staggering total of 52.38 percent of respondents regarded

transformational as the most important. The reviewed literature linked transformational, democratic and open leadership with emotional intelligence.

There are some leadership styles which are destructive and not conducive for organizational performance. In the current study, these included autocratic and toxic leadership styles. A total of 55.55 percent of the participants pointed out that toxic leadership was the most undesirable in organizations. About 26.98 percent mentioned autocratic leadership as the most undesirable. A total of 4.76 percent viewed a combination of the two styles as the worst. Literature review also made it clear that toxic leadership style release negative energy among members within the organization. Negative energy is one thing that the organization does not need. Under these circumstances, organizations may spend more of their day-to-day business activities focusing on how to sort out the resentment that will have been caused by the toxic leadership. Reviewed literature highlighted that autocratic leadership was still relevant in the military environment. This view was also shared by some of the participants in this study.

Participants saw various combinations of leadership styles as more important for organizations. About 33.33 percent of respondents thought the combination of transformational and strategic leadership styles was likely to produce more positive results while 8.33 percent thought a combination of transformational, strategic and open leadership styles was more relevant (see Chapter Four). It can be noted that whenever the best leadership style is sought for good or better organizational performance, transformational leadership style always took the lead. The participants felt that the worst combination of leadership styles was that of toxic and autocratic leadership styles. This combination was viewed as the most perfect recipe that can bring an organization to its failure. This finding about Toxic leadership is aligned to what the literature says especially about Toxic leadership style. Judge *et al.* (2009) describe toxic leadership as one of the most destructive type of leadership with a high potential to bring an organization to its knees. This type of leadership can create dysfunctional personality qualities in employees and hence consequently undermine the performance of organizations (Judge *et al.*, 2009).

Implications and Limitations

The results collected in this study may be used by various organizations to establish whether they have the best leadership styles in place to drive their operations. This is because for organizations to prosper there is a continued need for investing in the best leadership styles available. When organizations fail to achieve their primary goals, it is essential to assess whether the nature of leadership being practiced in the organization is not responsible the failure. For an instance, if a toxic leader heads an organization then there is very little chance that the organization will survive.

It however needs to be stated that when it comes to issues of organizational failure, there are a lot other factors that may contribute to it. However, those factors will depend on how the leader reacts to them. In this study, the major challenges and weaknesses faced during the fieldwork related to the budgetary and time frame constraints as well as issues relating the researcher's bias. The key issue under investigation in the study was how leadership styles impact on organizational performance. Another challenge was related to how the researcher could deal with personal bias. With the strong emotions evoked by leadership in organizations, the researcher had to control his own bias so as not to undermine the findings. The researcher's personal bias was dealt with through the use of a single data collection technique. This ensured that facts would be reported as they were. The other challenge was related to financial and time constraints which limited the researcher from studying more participants from different organizations. This could have unraveled important factors about leadership styles. The researcher believes that this did not compromise any ethical commitments of the study

Recommendations for further Research

In view of the data gathered in this study, the following recommendations are made:

Organizations need to ensure a continuous check on leader -employee relations through completely anonymous questionnaires and interviews so that people will tell the truth without the fear of victimization. It is important to assess the "type" of a leader in terms of leadership styles before he/she is promoted to take

leadership roles in the organization in order to make proper placements. This will allow the organization to assess whether that type of a leader is suitable for the organization.

The assessment of the leader must also include the vision or strategy that the business wish to pursue because it will be fruitless to get a leader that is not going to promote the vision of the organization. The organization also needs to be aware that performance is linked to the leadership styles. Future research should focus on how models can be developed on how to make proper placements to leadership levels/roles. Research should also focus on how leadership styles dovetail with other organizational efforts which are meant to boost organizational performance.

Conclusion

In view of the reviewed literature as well as the fieldwork with MBA year three students at the University of KwaZulu-Natal, this study concludes that leadership styles do have an important impact on the performance of the organizations. It has been found that some leadership styles (transformational, strategic and open) have the potential to take organizations to high levels of productivity and continuity. These styles are also likely to promote employee engagement in the organization. On the other hand, styles such as toxic and autocratic styles were viewed by participants as not only dangerous but also destructive to organizations and to employees.

In view of the above, it may be asserted that the study was successful in meeting the research objectives. It was established in the study that the participants understood and were able to differentiate the various leadership styles exhibited in organizations. The study also found out that the participants did not encourage the application of toxic and autocratic leadership as these were viewed as destructive to organizations. On the other hand, transformational, strategic and open leadership styles were revered as the best leadership styles.

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Paper 8

Factors to improve the level of implementation of Electronic Health Records in primary health care facilities of South Africa

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Abstract: South Africa identified Electronic Health Records (EHR) system implementation as a crucial factor for the success of the National Health Insurance (NHI) strategy to ensure continuity of care in both the public and private sector. The main purpose of this study was to develop factors which could be used to improve the implementation of EHRs in the primary health care facilities of South Africa. The study made use of the qualitative approach to collect data. Literature from different authors who had previously investigated the implementation of EHRs was identified through a structured literature review. Sixteen articles were evaluated and it was found that there are issues such as the access to information and communication technology (ICT) and the cost of implementation or maintenance affecting the use of EHRs across all nine provinces of South Africa. The study further identified the following six critical success factors: documenting a policy document; having leaders to steer the implementation of the policy document; prioritizing procurement and maintenance of ICT infrastructure of EHRs; sourcing and promoting transparency of health financing; ensure proper evaluation of EHRs and lastly prioritizing recruitment, training and upskilling of healthcare workers. The study therefore recommends that the National Department of Health make use of these critical success factors for the improved implementation of EHRs in the primary health care facilities of South Africa.

1. Introduction

South Africa's National eHealth strategy states that the introduction of eHealth in the health sector is a crucial factor to ensure continued quality health care provision in primary, secondary and tertiary health care in both the public and private health sector (Department of Health, 2012). According to Meditech (2017), EHRs are defined as "an electronic type of a patient's medical history file". The records are usually preserved by the service provider and contain all health provider key information relevant to the patient's care, including location, development records, treatments, medical history, laboratory records and radiology reports (Yanamadala, *et al.*, 2016). The World Health Organization (2006) highlighted the need to automate health records of patients across the world to improve quality health care. Unfortunately, in most developing countries, EHRs are still to be implemented due to challenges such as the access to information and communication technology, computer literacy and cost of implementation or maintenance (Adeloye, *et al.*, 2017). The National Department of Health (NDoH) acknowledged that a functional EHRs is key to the implementation of the National Health Insurance in South Africa in the E-health strategy document that was published in 2012 (Katurura & Cilliers, 2017). The Department, together with the CSIR, also published the National Health Normative Standards Framework for Interoperability in eHealth in South Africa to support the implementation of EHRs. However, the implementation of EHRs across South Africa remain fragmented (Katurura & Cilliers, 2017).

The implementation of EHRs in South Africa dates back to May 2002, when the NDoH initiated the project (Kleynhans, 2011). However, the rollout of EHRs has had limited success, with only five out of the nine provinces in South Africa having implemented some form of EHRs (Katurura & Cilliers, 2017). Some of the reasons provided for this poor performance are cited as insufficient funding, lack of ICT infrastructure, lack of skilled health care workers and poor leadership which needs to be addressed so as to improve the

implementation of EHRs (Clausen, 2015). The main purpose of this study was to develop factors which could be used to improve the implementation of EHRs in the primary health care facilities of South Africa.

The paper continues with the current EHR implementation situation in South Africa, followed by the methodology of the study followed by the literature review which highlights some of the challenges faced in the implementation of EHRs. The paper then goes on to discuss the identified critical success factors for improving the implementation of EHRs before going on to conclude the paper.

2. EHRs in South Africa

South Africa published the eHealth Strategy in the year 2012, the strategy policy document was to ensure the implementation of various eHealth technologies inclusive of EHRs. A team of dedicated health care workers and health stakeholders were amongst the team which drafted the policy document. The team was to ensure that there is a policy in place, to drive towards the successful implementation and maintenance of functional Health Information System (HIS) (Department of Health, 2012). The South African government, through the NDoH, also ensured that there is stakeholder engagement and involvement through the eHealth Strategy. Key stakeholders were able to brainstorm ideas and factors necessary for the successful implementation of EHRs. The eHealth Strategy policy document highlights the importance of standards and interoperability to ensure standards are maintained across software, hardware, network, data structure, coding language and security (Masilela, *et al.*, 2014). However, only five provinces in South Africa implemented some form of HIS, in the form of EHRs system. The provinces making use of EHR system, have various EHRs system from different vendors (Katurura & Cilliers, 2017). This is a problem as standards were not maintained between the private and public sector and this may lead to difficulties in integrating the different EHR systems as highlighted earlier as a disadvantage of EHRs (Katurura & Cilliers, 2017).

The availability of adequate finance is another challenge affecting the successful implementation of EHRs in primary health facilities of South Africa. Implementation of EHR needs substantial amount of health financing and investment (Weeks, 2014). As noted in 2016, the Department of Health had not managed to raise enough funds to fully implement EHRs across South Africa. Funding is still a major obstacle, limiting the successful implementation of EHRs across all the provinces of South Africa (Thomas, 2016). South Africa is also faced with the capacity and skills shortage challenge of health care personnel. EHRs requires skilled personal for the operation of the software, hardware and networks (Katuu, 2016). However, the skills shortage is a stumbling block in the implementation of EHRs in primary health facilities. Shortage of skills is not limited to individuals operating the EHR system but also affects health care workers that offer health care provision to patients (Clausen, 2015). To mitigate the challenge of skills shortage, there is a need for adequate funding to promote training and education of health care workers in order to equip them with the skills necessary to operate EHRs systems as well as the provision of health services to patients (Hoover, 2017).

The lack of investment and funding resulted in limited access to ICT infrastructure. As a result, the lack of funding for the required ICT infrastructure affects the successful implementation of EHRs across the nine provinces of South Africa (Katuu, 2016). Not all provinces in South Africa have the required infrastructure, including connection media, hardware, software to support the full implementation of EHRs (Weeks, 2014). There is a need to approach health care sector industry leaders to come up with strategies to source funding to facilitate the improvement of the ICT infrastructure in place. On the other hand, benefits realizations are difficult to measure when it comes to service provision and IT, thus making it difficult to get investors. The time frame for realization of these benefits varies across provinces and countries, some take longer than others mainly because of the population and economy. It is important to note as well that EHRs were mainly developed for hospital systems in developed countries, thus it might be difficult for developing countries making use of EHRs in the primary sector to realize the benefits (Kruse, *et al.*, 2016). The next section discusses the methodology followed with the structured literature review.

3. Methodology

This study made use of a qualitative, interpretive approach. A systematic literature review was used to review literature from previous studies such as articles from academic journals, books in both print and electronic formats, conference proceedings, relevant websites and theories relating to this study. Electronic databases such as ACM Digital Library, Sage Online Journals, Science Direct, Springer Link, and Sabinet Reference were used to find relevant literature. The data was collected through a systematic literature review that followed the guidelines of the hermeneutic framework which allowed the researcher to conduct several iterations through the data sources to gain a better understanding as well as identify all relevant information to the study. Research keywords that were used during the search can be seen in Table 1.

Table 1: Keywords (Katurura & Cilliers, 2016)

Search phrase	Reason for modifying
Electronic health records (EHRs)	The original phrase used to search all databases.
Electronic health records + implementation	Used to refine the search results to only include articles that focus on the implementation of EHRs
Electronic health records + public health	Used to eliminate studies that discussed EHR implementation in private health care providers.
Electronic health records + public health + South Africa	Used to find studies that were conducted in South Africa only.
Electronic health records + implementation + in Africa	Used to refine the search results to articles that focus on EHRs implementation in Africa.
Electronic health records + implementation + in Africa/(name of African country)	Names of African countries known to have implemented EHRs such as Ghana, Nigeria and Kenya were used in the search query to refine the search.
Electronic health records + public health + (name of African country)	Variations of the above search phrase used for identifying articles that did not talk about implementation process but discussed possible causes of project failures in African countries.
Electronic Patient Record + implementation	A variation of EHR used in some sources referring to the same type of EHR system as defined in the study
Electronic Medical Record + implement	A variation of EHR used in some sources referring to the same type of EHR system as defined in the study
Computerised Patient Record + implement	A variation of EHR used in some sources referring to the same type of EHR system as defined in the study

The inclusion criteria for the study consisted of the following: 1) implementation of EHRs in public health care facilities in South Africa or Africa. African countries were included as these were considered comparable to circumstances in rural areas of South Africa. 2) the articles were published between 2010 and 2018. A forward and backward search strategy was adopted to ensure that all useful references were included in the review. After the 16 articles were identified, a thematic analysis was conducted on these articles to identify relevant themes. The final findings from the analysis of the gathered literature were grouped based on the themes found from the step above.

4. Results from Review

In order to increase the chances of the successful implementation of EHRs, studies found that there should be factors in place such as policies and strategies, implementation financing, standards and regulation, eHealth infrastructure, user training skills and commitment. These factors are further discussed below.

Policies and strategies

A challenge faced by most African countries in the implementation of eHealth systems such as EHRs is that of not having a clearly defined policy and strategy in place to support the system. Furthermore, some of the African countries which do have a well-defined eHealth policy document may not have the appropriate implementation strategy of EHRs, thus limiting the successful implementation of EHRs (Mostert-Phipps, *et al.*, 2013). The adoption of policies and strategies is critical to ensuring the successful implementation of EHRs. Botswana, in November 2010, published a policy document titled "Integrated health service plan: A strategy for changing the health sector for a healthy Botswana 2010-2020" [Ministry of Health: Government of Botswana, 2010]. Botswana boasts of the successful implementation of EHRs throughout the country and the policy document played a role in the successful implementation of EHRs (Meditech, 2017). South Africa eHealth Strategy policy document has had partial success in that five of the nine provinces in South Africa have implemented some form of EHR system (Katurura & Cilliers, 2017). Development of a national policy as well as guidelines for the implementation of EHRs and other eHealth services thus could assist authorities to manage the EHRs implementation efforts at a national level (Luna, *et al.*, 2014).

Implementation financing

For the successful implementation of EHRs there is a need for adequate financing to cater for the initial cost of implementation of the EHR infrastructure and the substantial maintenance of the EHR system infrastructure. The infrastructure includes both hardware required, software required to run the EHR systems as- well as the licensing fees associated with the software. In Ghana, the challenge of sourcing funding for the successful implementation of EHR was identified as the immediate challenge. Funding is a critical factor to the success of eHealth projects (Mugo, & Nzuki, 2014). Often countries with thriving economies can allocate a relatively large budget towards the health sector in order to promote eHealth projects; however, countries which do not have the means often struggle to have any form of implementation. There is need for collaborative work with local software and hardware vendors for the development of scalable, low cost eHealth systems thus helping in the implementation of an affordable EHRs (Cline, & Luiz, 2013). It is important to note that financing is not limited to the implementation of the EHR system, instead associated costs such as the training of end-users of the systems and other costs associated with the implementation of EHRs need also to be accommodated (Adeloye, et al, 2017).

Standards and regulation

The implementation of EHRs needs to be regulated to ensure standards are upheld. These standards include the type of hardware and software that must be used in the implementation of EHRs. The use of standards and regulations ensure the implementation of EHR systems nationwide which would be easy to integrate and communicate, thus avoiding the complications which arise as a result of using various software and hardware (Monawe, *et al.*, 2015). Governments can ensure that health care providers implement EHR systems within regulation standards through the establishment of professional bodies. In addition, professional bodies, which may consist of experts in EHRs, may assist with the development of best business practices through analyzing countries which went on to successfully implement EHR systems (Mostert-Phipps*, et al.*, 2013).

Figure 1: PRISMA Model
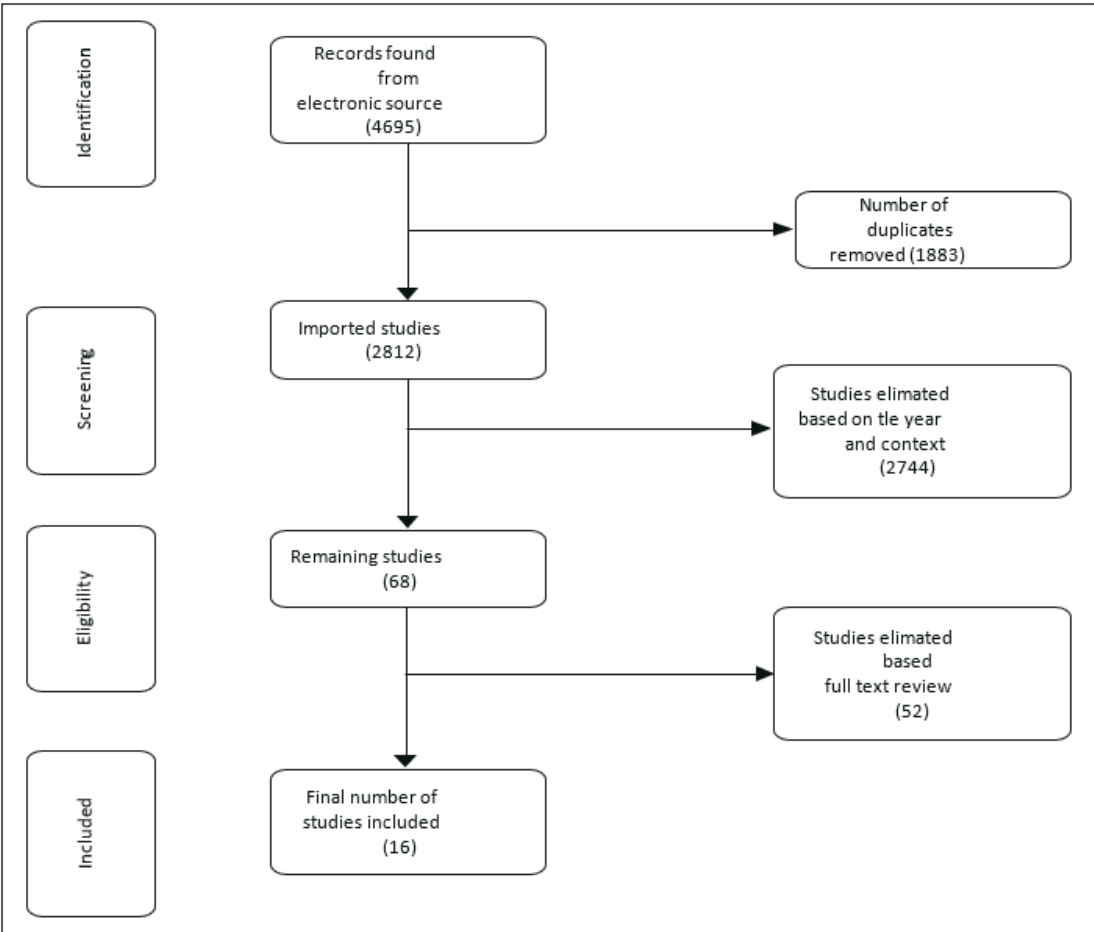
eHealth infrastructure

The ICT infrastructure in most developing countries in Africa needs to be evaluated and improved before implementation of a national EHR system. Most of the developing countries have internet challenges such as the non-existence of internet connectivity in rural areas of the country as well as bandwidth issues (Mostert-Phipps, *et al.*, 2013). There is also a need for ICT infrastructure, such as hardware infrastructure which includes computers, networking equipment, software and servers which use the internet to communicate and share information over distance to be in place nationwide and the substantial maintenance of the infrastructure to avoid downtime of the EHR system as a result (Cline, & Luiz, 2013). South Africa's ICT infrastructure varies across different provinces with some provinces having inadequate ICT infrastructure to complement EHR systems. Government should be able to assist in improving the infrastructure for areas with minimum infrastructure in place by approaching local vendors and subsidizing the needed infrastructure for the provinces which are yet to implement any form of EHR system. For developing African countries, an investigation into alternative connectivity technologies may provide a solution for the connectivity and bandwidth issues currently experienced (Monawe, *et al.* 2015).

User training skills and commitment

Involvement of health care workers in the development and deployment of eHealth solutions such as EHRs can improve their commitment to the success of such projects. Substantial training of health care workers may help ensure that all health care workers have a basic understanding of any HIS. Training can be introduced at two levels, the first being at school for unqualified health care workers in order for them to graduate with the skill and knowledge so as to ensure their competency before entering the workplace (Ojo,

& Popoola, 2015). The second level is to upskill the existing qualified health care workers with the skills set of how to operate the system. Involvement of health care workers in the development process can lower the training requirements for the final deployment of the systems as the staff will be already familiar with some of the system's attributes (Mostert-Phipps, *et al.*, 2013).

Lack of tools to evaluate level of implementation
A Maturity model can be defined as "a tool that helps individuals, groups or organizations evaluate the current level of performance or effectiveness to identify the capabilities which are essential for an individual, group or organization to improve their performance or business processes" (Proença, & Borbinha, 2016]. Maturity models are used to measure the performance of an individual, project or an organization. One of the maturity tools that is often used project management is the Balanced Scorecard which is used as a framework for measuring individual, project and organizational performance making use of a balanced set of performance measures (Stewart, 2001).

A study was conducted to assess the use of the Balanced Scorecard in the health sector. The findings of the study noted that the balanced scorecard was being used by several industries such as the production and manufacturing industries, yet there was a relatively slow uptake and use of the balanced scorecard in the health industry. One notable reason identified is that the health industry relied heavily on the use of non-financial statistics. However, it was also noted that the balanced scorecard had been introduced across all areas related to the health care industry such as in hospitals, health care systems, university health departments, long-term care, mental health centres, pharmaceutical care and health insurance companies (McDonald, 2012).

5. Critical success factors

Rad (2015) defined critical success factors as "contending that an organization's information necessities are considered by a tiny number of critical success factors (CSFs) of managers. If these objectives can be achieved, prosperity of the company or organization is guaranteed." Several limitations such as leadership and governance challenges, human resource crisis, poor ICT infrastructure and health financing need to be addressed to increase the chances of the successful implementation of EHRs. Based on the findings from the research, the author highlights some recommendations that would improve the successful implementation of EHRs in primary health care facilities in South Africa.

CSF 1: Document a sustainable strategy or policy document for the implementation of EHRs
There is need for a country to have a policy which promotes the use of EHRs, for example, South Africa's eHealth Strategy, highlight this importance in the previous section. Having a sustainable strategy for the successful implementation of EHRs is key to achieving the desired goal of any objectives or targets set. It is vital that all stakeholders such as health care workers, patients, government officials and ICT industry experts be involved. The involvement of all affected stakeholders ensures that all valuable interests of each stakeholder will be considered and addressed. Industrial experts from either the health care or ICT industry can share their experience and help set objectives which are achievable through sharing ideas and agreeing on what is achievable and realistic.

In addition, stakeholders may outline certain strategies on how to promote computer literacy amongst health care workers and have a system in place on training of health care workers at entry level to promote efficiency and effectiveness. Training health care workers enables them to make use of various health information systems. In addition, a policy to maintain the EHR infrastructure which includes computer hardware, computer software and networking infrastructure ensures EHR. Having a well looked after and serviced EHR ensures minimum down time of the system thus offering uninterrupted health care service to patients.

To avoid integration challenges of HISs, ICT experts can draft a policy or strategy document with details of the procurement process of computer hardware and software. This can be done to ensure that both hardware and software meet the set standard, which enables the successful integration of the various HISs systems. An

example would be of making use of a certain programming language such as C# or the use of SQL Databases in the various provinces. It is also recommended that the policy document outlines the maintenance concerns of both the hardware and software to ensure that software licenses are paid and up to date as well as computer hardware being well serviced to avoid costly down times because of poor maintenance. The policy document may have set objectives with dates, however it necessary to have personnel who govern such policies to ensure the full implementation of the policy and this will be highlighted in the following recommendation.

CSF 2: Appoint leaders to steer the policy and government to enforce legislation
Having a policy or strategy document does not ensure the successful implementation of EHRs. It is essential to have a team of industry leaders in place to ensure that the policy document or strategies introduced are being implemented accordingly thus increasing the chances of the successful implementation of EHRs. The team can be there to gather support of all stakeholders during the implementation of EHRs as well as to give feedback to stakeholders. In areas where some of the stated tasks or objectives need revision, the appointed team can address the issues in a timely manner. This will ensure that the project does not stall at any given time. In addition, government through legislation may also enforce a law, which will ensure the use of EHRs throughout the country. It is also important that legislation also considers the security aspect of the sensitive information contained in EHRs and enforces a law that protects the confidentiality of the private information contained in EHRs from unauthorized personnel.

CSF 3: Prioritize procurement and maintenance of ICT Infrastructure for EHRs
It is important that all provinces in a country have a sustainable ICT infrastructure which will enable the implementation of EHRs. An assessment into the existing infrastructure is necessary to establish the state and lifespan of the current infrastructure. Having a clear picture of the current infrastructure and its capabilities is important in ensuring that provinces without the required infrastructure are prioritized before others. Provinces with poor ICT infrastructure that face challenges such as poor internet connectivity need to be addressed and acquire the much-needed infrastructure which will enable communication across the various provinces.

The author also recommends that the infrastructure being setup for EHRs needs to meet the stated standards set in terms of brand name, configurations and languages used by the systems in the ICT infrastructure. Having various infrastructural standards such as hardware and software procured from different vendors may lead to integration challenges which may make it difficult for EHRs from the different provinces to communicate effectively. The ICT infrastructure needs to have regular maintenance to ensure that the EHRs system is not interrupted during operation. This will avoid costly downtimes as both health care workers and patients will not have access to their vital information because of the downtime. It is important to understand the associated maintenance costs and availability of the spares or parts to replace the faulty parts if there are any.

CSF 4: Source health financing from various stakeholders and promote transparency
Projects, business process, computer hardware and software have been highlighted under the budget aspect. The successful implementation of EHRs requires funding for the project to kick start and have adequate budget set aside to ensure that the project is completed and meets the set targets. The implementation of EHRs will also require funding to purchase computer hardware and software to set up the ICT infrastructure. Funding will also be required to ensure that the computer infrastructure is well maintained to avoid costly system downtime due to poor maintenance. Having a proposed, adequate budget for acquiring and maintaining the ICT infrastructure is important for the completion of a project. As things stand, the primary health care sector's primary sponsor is the South African government. The Provincial Department of Health gets a fraction of the national budget from the government. The funding from the government alone has proved to not be enough for the department as it has a number of obligations other than the implementation of EHRs.

To increase the list of financial sources, it is advisable that the stakeholders consider and approach local software developers and computer manufacturers which may offer relatively affordable products and

services as well as maintenance costs rather than the ones offered by global markets. The Department of Health may as approach the private sector for funding, an example would be approaching multinational companies operating in communities with primary health care facilities. To ensure future funding from either the government or private sector, there is need for a culture of transparency. This may be achieved by publishing records of how funding was sourced and used, including budgets. If there is no mismanagement of funds, well-wishers and donors are likely to continue funding the cause and feel part of the project.

CSF 5: Prioritize recruitment, training and upskilling healthcare workers

The African continent is faced with a challenge of a shortage of skilled health care workers, as is South Africa. The implementation of EHRs is not immune to this challenge. To overcome the challenge, it is recommended that stakeholders determine strategies to facilitate upskilling of health care workers. For instance, one could assess the number of health care training centres across all nine provinces in South Africa and going on to increase the capacity in areas that have limited capacity. The stakeholders may approach the government to facilitate adequate funding schemes for deserving prospective students who may be interested in training as health care workers. It may also be necessary to assess the educational entry requirements for health care workers and if there is need to adjust the entry requirement so as not to exclude several potential students without impacting the quality of the graduating work force. Alternatively, government together with the Department of Health may opt to import skilled and experienced health care workers from abroad to come and head various health institutions and train health care workers.

To mitigate the skilled human resource shortage challenge in the health care sector, the author recommends that the Department of Health together with the Department of Education should join forces and identify policies which complement the two departments. For instance, the Department of Education could create a syllabus which ensures that all students have a basic understanding of the use of a computer device from the time they leave High School, build on their acquired computer skills by the time they graduate from tertiary education. This will help the health sector to reduce training costs as well as time set aside in training health care workers to use various HISs. To curb the loss of skilled and experienced health care workers to disease and retirement, it is advisable to constantly have awareness campaigns of diseases which might affect society as well as to have a drive across the country to draw in young people to join the health sector through training as nurses and doctors at various higher education institutions across South Africa.

CSF 6: Ensure accountability by measuring implementation of EHRs

A Maturity model provides a tool that helps to determine the current level of performance or effectiveness of an EHRs. There are several maturity models that have been identified by Carvalho, Rocha and Abreu (2016) that can be used for this purpose. The political will to implement and use such as system must be present in the country for it to work correctly. The correct model to evaluate implementation of EHRs will provide valuable insight into the performance of the system which will highlight aspects that the NDoH must work on to reach the desired state of implementation of EHRs in South Africa.

6. Conclusion

The main research question refers to the critical success factors to improve the implementation EHRs in primary health care facilities in South Africa can be identified. To answer the research question a structured literature review was conducted to identify relevant literature. From these articles themes were identified that are barriers to the implementation of EHRs after which six critical success factors to improve the implementation of EHRs in primary health care facilities were developed. The researcher recommends six critical success factors namely; documenting a policy document; having leaders to steer the implementation of the policy document; prioritizing procurement and maintenance of ICT infrastructure of EHRs; sourcing health financing from various stakeholders and promoting transparency, prioritizing recruitment, training and upskilling of healthcare workers and lastly to ensure proper evaluation of EHRs. One of the limiting factors for this study was the unavailability of literature reviewing implementation issues specific to EHRs in Africa. A further limitation is the lack of external input on the themes and CSFs that were identified in this article. Future research should evaluate the CSFs and recommendations through participation of health workers and other experts in the field of health informatics.

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Paper 9

Perceived factors that will inhibit social media in the workplace in the South African higher education sector

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Abstract: Social media has infiltrated the workplace, but there is no clear evidence on how and when employees should be allowed to use the technology. Employers remain concerned that social media may interfere with the productivity of workers. The purpose of this study was to identify the perceived factors that will inhibit the use of social media in the workplace among employees in the South African higher education sector? The overall research question that guided this study was: *What is the perceived negative impact of social media in the workplace among employees in the South African higher education sector?* The research made use of the positivist paradigm with a descriptive, quantitative survey approach. The data were analyzed making use of exploratory factor analysis and multiple regression analysis. A traditional higher education institution was chosen as the research site for the study where a convenience sample of 134 respondents were identified. The findings suggest that employees in higher education perceive social media to have a negative effect in the workplace if the technology is deemed offensive, waste time of employees and damage relationships among colleagues.

Keywords: *Social media; South Africa; Workplace; Higher education*

1. Introduction

Kaplan and Haenlein (2010) define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (p. 62). In South Africa, almost 31 million South Africans make use of their mobile phones to access social media sites. Facebook is the most popular social media site with an estimated penetration rate of fifty three percent among South Africans (BusinessTech, 2019). The introduction of social media in the workplace has made possible new methods to communicate with employees, improve knowledge sharing in and management of the workplace (McAfee, 2006). Employees are more computer literate and savvy than previous generations and there is an expectation that they will be able to access social media during the workday (Maryott, 2010). However, the presence of Facebook in the workplace has created a collection of issues often related to the grey area between an employee's work and private live (Forsyth, 2014).

Globally, a third of companies reported making use of different Web 2.0 technologies in their organizations to coordinate their marketing activities, marketing research, customer service, recruitment and promotion strategies (Gerber, 2016; Okazaki & Taylor, 2013; Shepherd, 2011). While there is no doubt that the ubiquitous nature of social media has infiltrated the workplace, the debate about how and when employees should be allowed to use these technologies has not been answered sufficiently (Seman, 2014). Following this trend, Chinyamurindi and Louw (2010) and Cilliers, Chinyamurindi and Viljoen (2017) argue that more research is needed that focuses on social media within the South African workplace.

Social media technologies include social networking sites (SNS), blogs, wikis, or social tagging tools (Treem, & Leonardi, 2012). There is a concern that social media may subtract from the productivity of workers. Some studies found that the Facebook access in the workplace can reduce productivity by up to one and a half percent as it leads to distraction and reduced individuals task performance (Zhang, Gao, Chen, Sun & de Pablos, 2015; Kishokumar, 2016). Employers have stated that they consider social media to be time-wasters and security traps where employees can spend an extended period online if not monitored (Turban, Bolloju &

Liang, 2011; Leftheriotis, & Giannakos, 2014). However, evidence in the literature is still not conclusive, with some studies suggesting that productivity in the workplace can be increased through social media (Cilliers, Chinyamurindi & Viljoen, 2017; Palonka & Porebska-Miac, 2014; Stefko, Bacik & Fedorko, 2014). Myers (2014) suggests that social media can be referred to as the 'new virtual water cooler' as it provides more opportunities for employees to connect and share information at a corporate level.

Research Purpose and Objective
Early studies in the area of social media investigated ethical concerns, privacy and security issues in the workplace, but few of the studies focused on the use of social media in the workplace and how it influences job performance (Ouirdi, Ouirdi, Segers & Henderickx, 2015; Clark & Roberts, 2010; Dinh, 2011; Dwyer, 2007; Patel & Jasani, 2010). Most studies focus on the externally facing usage of social media technologies such as advertising, marketing activities and communication in the organization (Ouirdi, Ouirdi, Segers & Henderickx, 2015).

Generally, empirical work in the field of ICTs within the South African workplace only investigates the general role that these technologies play (e.g. Cilliers, Chinyamurindi & Viljoen, 2017; Chinyamurindi & Louw, 2010; de Wet, Koekemoer, & Nel, 2016; Erasmus, Rothmann, & van Eeden, 2015), while little attention is given to specific social media technologies that are used in the workplace. In academia, the focus of this study, social media has been used as a technology to improve collaboration and communication between lecturers and students (Cilliers, 2016; Murire & Cilliers, 2017; Ferreira & du Plessis, 2009). However, not many studies have focused on the negative impact that social media can have amongst academic employees in the workplace. The purpose of this study was to identify the *perceived factors that will inhibit the use of social media in the workplace among employees in the South African higher education sector.*

2. Literature Review

Empirical Literature
Mobile technology has become a preferred mode of communication for many South Africans. A recent study suggested that university students are the most active mobile phone users with the functions most often used including text messaging, gaming and the Internet (Cilliers, 2016). Given the popularity of mobile communication among this age group, the potential to use social media to improve academic activities at higher education institutions is immense (Robinson 2014). Despite the potential benefit of social media in teaching activities, the technology has not been widely adopted by lecturers at traditional universities in South Africa for teaching purposes and not much is known of how social media impacts the academic workplace (Murire & Cilliers, 2017). De Wet, Koekemoer and Nel (2016) stated that all organizations must integrate ICT in order to stay competitive. The absence of ICT will lead to major dissatisfaction amongst employees and customers as it is now viewed as a basic necessity. Similarly, social media has also infiltrated the workplace and has blurred the lines between an employee's social and private life. Facebook is commonly referred to as grassroots technology, which means that the employees are familiar with the technology and are more likely to adopt it for business purposes (Cilliers, Chinyamurindi & Viljoen, 2017).

There is limited research available on the topic of social media in the workplace (De Wet, *et al.*, 2016; Erasmus, *et al.,* 2015). Social media can influence the employee in a positive or negative manner. Advantage of using social media in the workplace include improving the ability of the employee to do their job, manage the reputation of their organization and share ideas with fellow employees. The negative effects include increasing work demands, higher stress levels, and the difficulty to disconnect from work when at home (De Wet*, et al.* 2017; Cilliers, *et al.*, 2017).

North (2010) reported in their study that employees believed that the use of social media are beneficial in the workplace. Social media provided a channel to share information and knowledge, meet new friends, obtains a sense of belonging in the organization and develop a deeper relationship with other people (Zhang, *et al.* 2015). Several studies found that these benefits lead to higher employee morale, higher retention rates and organizational commitments (Leidner, *et al.*, 2010; Li 2010; Patel & Jasani 2010). These benefits were especially useful for new employees that could connect socially with family, friends and other co-workers

resulting in a better work-life balance (Leidner *et al.*, 2010; Patel & Jasani 2010). Leonardi (2017) points out that communication about routine work matters between people can leak out of the channel and into other people's streams of awareness. If the information is damaging or in bad taste, it can damage relationships within the workplace. In line with the literature, the following hypothesis was formulated:

H¹ Relationship damaging social media behaviour does not have a significant influence on behavioural intention to use social media in a work-related context

Leonardi (2017) stated that social media in the workplace has become the "social lubrication" that makes it possible for colleagues to find out more about each other and build a relationship around shared interests. Treem and Leonardi (2012) found that social media has the following benefits when employees make use of the technology in the workplace: visibility, persistence, editability, and association. Visibility refers to the employees' ability to make their behaviours, knowledge, preferences, and communication network connections visible to other employees in the organization. This can be a double edge sword as behaviour in the private domain is also available within the workplace and get hurt the reputation of an employee. Employees can find the domain knowledge to understand the work practices of other departments or employees as their contributions can be easily found (Cross, *et al.* 2003). Visibility also allows employees to identify meta-knowledge about employees in the organization and locate experts on specific topic areas with ease. In this way, employees learn more about the interests, culture, and activities of co-workers, although this could lead to bias or discrimination if the values of the employee is not the same as the culture of the workplace (Treem & Leonardi, 2012). All these activities can impact the reputation or standing of the employee among their peers, therefore the following hypothesis was formulated:

H² Professional reputation damaging behaviour does not have a significant influence on behavioural intention to use social media in a work-related context

Apart from the influence, social media can have on job performance; there are other harmful risks for the employee making use of this technology. Landers and Callan (2014) produced a taxonomy of harmful social media-related work behaviours in the workplace. These behaviours include creating offensive content, time theft where an employee receives an alert from social media that causes them to stop working, disparaging others by posting offensive texts/videos/pictures, representing the organization poorly, diminishing personal reputation, friend refusal and plagiarism. North (2010) found that many employees are ignorant or uninformed about these potential risks while they are increasingly making use of social media in the workplace (North, 2010; Ferreira & du Plessis, 2009).

H³ Offending others via social media does not have a significant influence on the behavioural intention to use social media in a work-related context

Job performance refers to "behaviours or actions that are relevant to the goals of the organization in question" (McCloy, *et al.* 1994). Job performance is characterized by productivity which is measured regarding labor hours spent by the employee on a given task (Aguenza, *et al.* 2012). While social media can facilitate communication and knowledge management, both of which are important to the success of employee job performance, there is a concern that it could also interfere with the employee's performance (Kishokumar, 2016). Employers fear that social media will adversely affect the productivity of the employees as a result of time wasted at work. This phenomenon is called presenteeism (D'Abate & Eddy, 2007). The original definition of presenteeism described "situations where employees come to work when they are ill or injured and due to their illness or injury they perform below peak levels, such as producing lower quantity of output or lower quality of work, making mistakes, and repeating tasks" (D'Abate and Eddy, 2007). This definition was later expanded to include any non-work-related activities that employees engage in for a portion of the workday, which results in a loss of productivity (Moqbel, *et al.* 2013). The activities that involve technology can range from checking Facebook updates, sending and receiving e-mails from friends and shopping online (D'Abate and Eddy, 2007).

Recent literature suggests that it is not the presence of the technology that influences the productivity of employees, but rather how it is being used (Cao *et al.*, 2012; Aguenza, Al-Kassem, & Som, 2012). In the workplace, the blurring of boundaries between the employees social life and the workplace can cause personal issues to interfere with work responsibilities as the use of the technology is permitted (North,

2010). Blocking social networking sites on the computers in the workplace is not necessarily translated into increased employee productivity. Mobile devices in the workplace is hard to monitor with several studies reporting that 80% of social media activity happens on these devices (Shepherd, 2011). If employees have to use social media as part of their work-related activities, it becomes even more accessible to justify the time spent on social networking sites (Maryott, 2010). The following hypothesis was developed to support this part of the literature:

H4 Time wasting social media behaviour does not have a significant influence on the behavioural intention to use social media in a work-related context

3. Research Methodology

This research study employed a positivist paradigm with descriptive research design and quantitative approach (Creswell, 2014).   Previous studies that investigated ICT in the workplace have used a similar research methodology within a South African context (Chinyamurindi & Louw, 2010; Chinyamurindi & Shava, 2015; Cilliers, 2016; Shava, *et al.*, 2016).

Measuring instrument

This research made use of a published work-related social media questionnaire (WSMQ) that was developed by Landers and Callan (2014). The instrument consisted of 26 items that were divided into three sections. Section A (6 questions) solicited demographic information from respondents which included ethnic group, age, gender, level of education, level of computer knowledge and employment status. Section B (17 questions) measured the negative work-related social media actions on a five-point Likert scale (1= Strongly Disagree to 5 = Strongly Agree). The variables that were tested were as follow: creating offensive comment; time theft, multitasking; disparaging others; representing the organisation poorly; relationship refusal, diminishing personal reputation and plagiarism. Section C consisted of the dependent variable measuring behavioural intention to use social media in the workplace (3 items).

Research participants

Data was collected from university staff, both academic and administrative at a traditional university. Before the data collection was conducted ethical clearance was obtained and respondents were informed in writing that their participation in the study was voluntary. The questionnaire was randomly distributed to 200 academics and administrators that attended a university event (over a period of one week). A total of 134 questionnaires were returned by the respondents, which translated into a response rate of 67%, which was deemed acceptable.

4. Results

The statistical analyses were carried out with the software programme SPSS V24. The Cronbach alpha coefficient (α) was used to test for internal consistency of the measuring instrument. Values of 0.70 and above represent a reasonable level of reliability, whereas values above 0.50 are considered to indicate an acceptable level of reliability (Pallant, 2010). The Cronbach alphas were calculated for both scales and found to be acceptable in both cases as displayed in Table 1.

Table 1: Cronbach alpha coefficients for the scales comprising the measuring instrument

Scale	Items	Cronbach alpha
Negative Work-related Social Media scale	17	0.842
Behavioural Intention to Use Social Media scale	3	0.698

Table 2 provides a summary of the descriptive statistics of the respondents who took part in the study.

Table 2: Descriptive statistics of respondents (n=134)

Gender	Male	Female		
	50 (37.3%)	84 (62.7%)		
Ethnicity	**Black African**	**Coloured**	**White**	
	111 (82.8%)	19 (14.2%)	4 (3.0%)	
Age	**20 -30 Years**	**31 - 40 Years**	**41 - 50 Years**	**Above 50 Years**
	11 (8.2%)	65 (48.5%)	51 (38.1%)	7 (5.2%)
Educational Qualifications	**Matric**	**Certificate**	**Diploma or Degree**	**Postgraduate Studies**
	4 (3.0%)	2 (1.5%)	78 (58.2%)	50 (37.3%)
Position in University	**Academic**	**Administrator**		
	58 (43.3%)	76 (56.7%)		
Computer Knowledge	**Great**	**Good**	**Average**	
	39 (29.1%)	93 (69.4%)	2 (1.5%)	

Table 3 provides an overview of the descriptive statements found in the WSMQ. It is evident that more participants agreed with the statements as illustrated by the mean for the various categories.

Table 3: Descriptive statistics for Work-related Social Media (WSMQ) results

		Minimum	Maximum	Mean	Std. Deviation
WSMQ1	I have shared my personal opinions on social media that others in my workplace found inappropriate or offensive.	1	4	3.36	.618
WSMQ2	Other people at work have been offended by something I posted on social media.	1	5	3.37	.698
WSMQ3	I have spent time on social media while at work when I should not have.	1	5	3.40	.747
WSMQ4	I've used social media when I should have been working.	2	5	3.34	.650
WSMQ5	I have posted negative opinions about my co-workers or customers on social media.	1	5	3.39	.725
WSMQ6	I have discussed negative feelings towards clients, customers, or co-workers on social media.	1	5	3.46	.711
WSMQ7	When I want to use social media, I do not take a break from working - I do both.	1	5	3.60	.716
WSMQ8	I access social media while I am doing other work.	1	5	2.93	.906

		Minimum	Maximum	Mean	Std. Deviation
WSMQ9	I have done poor quality work using my organisation's social media accounts.	1	5	3.04	.799
WSMQ10	When doing work for my organisation on social media, I have done a poor job.	1	4	2.89	.782
WSMQ11	My friends have posted photos, videos, or content about me on social media that harmed my professional reputation.	1	4	2.96	.770
WSMQ12	Clients or customers have posted information about me on social media that harmed my reputation at work.	1	4	2.96	.779
WSMQ13	I have invited a personal relationship with a client or co-worker that I should not have.	2	4	2.96	.692
WSMQ14	I have become close to someone I should not have at work because of social media.	1	4	2.99	.845
WSMQ15	I have submitted work that wasn't my own because it came from social media.	1	4	3.01	.710
WSMQ16	I have created an uncomfortable situation by refusing connections with co-workers, supervisors, or customers via social media.	1	4	3.01	.736
WSMQ17	It has felt awkward at work after I refused a connection on social media with someone at work.	1	4		.751

Factor Analysis

An exploratory factor analysis (EFA) was used to identify and validate the sub-constructs contained in the 17 item WSMQ. The suitability of the data for factor analysis was assessed before performing the principal components analysis. Inspection of the correlation matrix revealed the presence of many coefficients of 0.4 and above. The Kaiser-Meyer-Olkin (KMO) measure was 0.783, exceeding the recommended value of 0.6 and the Bartlett's Test of Sphericity reached statistical significance, supporting the factorability of the correlations matrix (Kaiser, 1974).

Principal components analysis revealed the presence of three components which collectively accounted for 63.74% of the variance in the data. The principal component analysis conducted utilized Equamax with Kaiser Normalization as the rotation method. The rotated solution revealed four components with some items loading on each of the components as is evident in Table 5. The four factors were assessed and named according to the components of the WSMUF. These factors include relationship damage, reputation damage, offending others and time wasting. The composite average variance extracted across the four factors amounted to 63.746.

Table 4: Exploratory Factor Analysis results

	Relationship damage	Reputation damage	Offending others	Time wasting
AVE	**20.182**	**38.528**	**52.269**	**63.746**
WSMQ12	.841			
WSMQ14	.753			
WSMQ16	.708			
WSMQ10	.707			
WSMQ8	.504			
WSMQ13		.845		
WSMQ15		.827		
WSMQ17		.707		
WSMQ11		.660		
WSMQ1			.792	
WSMQ3			.780	
WSMQ5			.777	
WSMQ2				.864
WSMQ4				.852

To conclude the issue of validity and reliability of the measurement instruments, it is important to note that re-tests of reliability were conducted based on the factors derived from the EFA. Adequate Cronbach alphas for the four factors and the dependent variable, the behavioural intention to use, were achieved as can be seen in table 4. The section directly following Table 5 provides the final operationalisation of the independent variables.

Table 5: Cronbach alpha coefficients for the scales comprising the measuring instrument

Scale	Items	Reliability
Relationship damage	5	.709
Reputation damage	4	.805
Offending others	3	.704
Time wasting	2	.701
Behavioural intention	3	.698

Operationalisation of independent constructs

Concerning relationship damage, the first independent variable, this construct consists of five items and primarily refers to damaging relationships with colleagues, managers or customers via social media interaction in a work setting (three items). The remaining two items of the scale reflect on employees not carrying out their job functions effectively in relation to or due to social media and this in turn damages relationships in the work environment. The second independent variable, reputation damage, is represented by four items which refer to aspects such as employees having posted materials on social media that harmed their professional reputations, social media relationships with clients or co-workers (or lack of such relationships) on social media and plagiarizing from social media for work-related tasks.

Offending others, the third independent variable, contains three items, two of the items refer to employees offending others with inappropriate or negative comments or opinions on social media. The other item of the sub-scale refers to employees engaging with social media at work which can be construed as annoying or offensive to colleagues as the employees are not performing their job functions by choosing to instead engage with others on social media platforms. In combining these three items, using social media while at work and posting negative comments regarding colleagues would be construed as highly offensive. The fourth independent variable is time wasting, the operationalisation of this construct is challenging as it only consists of two items which refer to using social media when an employee should be working and offending colleagues with social media posts. Factor loadings and reliability alpha indicate this construct is both reliable and valid thus respondents possibly interpreted the second item in the construct as utilizing social media for negative

purposes while the employee should be working with this social media behaviour having negative repercussions on other employees.

Correlation and Multiple Regression Results
A correlation analysis was done to determine the significance of individual relationships in the various hypotheses. Thereafter, a multiple regression analysis was conducted to provide the strengths and directions of the existing relationships. The results of the correlations achieved between the constructs are provided in Table 6.

Table 6: Test of correlation between constructs

		BIU	RM	RD	TW	OO
Pearson	BIU	1.000	.452	.486	.222	.137
Correlation	RM	.452	1.000	.509	.185	.212
	RD	.486	.509	1.000	.121	.050
	TW	.222	.185	.121	1.000	.207
	OO	.137	.212	.050	.207	1.000
Sig. (1-tailed)	BIU	.	.000	.000	.005	.057
	RM	.000	.	.000	.016	.007
	RD	.000	.000	.	.082	.282
	TW	.005	.016	.082	.	.008
	OO	.057	.007	.282	.008	.

Pearson's correlation coefficient was used to depict the level of correlation achieved between the variables under study. A p-value of less than 0.05 was selected to indicate statistical significance. Based on this explanation it can be concluded from Table 7 that the only significant and positively highly correlated relationship evident between the dependent variables (behavioural intention to use) and the independent variables (relationship damage, reputation damage, offending others, time-wasting) is the one that exists between behavioural intention to use and reputational damage. To further contextualize the various relationships and to understand the possible influence the independent variables have on the dependent variables, a multiple regression analysis (MRA) was conducted. The various summarized outputs generated from the MRA are presented in Table 7.

Table 7: Influence of independent variables on behavioural intention to use social media

Dependent variable: Behavioural intention to use – R^2 = .558			
Independent variables	Beta	t-value	Significance (p)
Relationship damaging	.244	2.795	.006
Reputation damaging	.345	4.046	.000*
Offending others	.042	.555	.580
Time wasting	.126	1.669	.098

(*$p<0.005$)

Based on the MRA findings presented in Table 7, the most influential and only significant independent variable on intention to use social media in a work-related context is reputational damaging behaviour. The second most influential factor is relationship damaging social media actions with third most influential factor being time wasting social media behaviour. The independent factor that had the least influence on intention to use social networking sites was the concept of the 'offending others'.

Hypotheses Results
Table 8 contains a summary of the hypotheses results. Three of the hypotheses were rejected as the behaviours they relate to have no significant impact on an employee's intention to use social media in a workplace environment.

Table 8:   Hypotheses results

Hypotheses	t-value	p-values	Supported/Rejected *
H[1] Relationship damaging social media behaviour does not have a significant influence on behavioural intention to use social media in a work-related context	2.795	.006	Rejected
H[2] Professional reputation damaging behaviour does not have a significant influence on behavioural intention to use social media in a work-related context	4.046	.000*	Supported
H[3] Offending others via social media does not have a significant influence on the behavioural intention to use social media in a work-related context	.555	.580	Rejected
H[4] Time wasting social media behaviour does not have a significant influence on the behavioural intention to use social media in a work-related context	1.669	.098	Rejected

* t-value >1.96; p-value <0.05 indicated significance

5. Discussion of Findings and Conclusion

Discussion

The overall research question that guided this study was: *What are the perceived factors that will inhibit the use of social media in the workplace among employees in the South African higher education sector?* In order to answer the research question, four hypotheses were developed. In the previous section, it was found that only one hypothesis, *Professional reputation damaging behaviour does not have a significant influence on behavioural intention to use social media in a work-related context,* was significant.

However, in discussing these findings, the variables need to be reversed in order to understand which factors can be considered more prohibitive to employees in utilizing social media in a work-related context. Based on this reversal, the following factors are ranked in order of importance from behaviour that is considered the highest deterrent to social media usage in the workplace to the lowest deterrent:

- Employees have the least intention to use social media if they believe their social media usage will be construed as offensive to others in the workplace
- Employees have less of an intention to use social media if they believe their social media usage will be construed as time wastage
- Employees will have concern over their intention to use social media if they believe that their social media usage will damage relationships in their workplace
- Employees are the least concerned about reputational damage while using social media in the workplace as this factor has the highest significant predictor of using social media in a workplace context.

Social media can be offensive or harm the relationship of employees in the workplace. According to Pi, Chou, and Liao (2013), multiple factors are affecting the attitude toward knowledge sharing in a social media group, such as reputation, expected relationship, sense of self-worth, and subjective norm. Employees choose to meet new people on Facebook and not only maintain existing relationships. This is problematic as employees may not accept each other's friends' requests and could inadvertently damage their relationship with their colleagues. However, employees were not concerned if they posted something that may be offensive to their colleagues. The lack of concern could point to the personal nature of social media where the employee feels free to post what they are interested in without any thought if the content may be offensive to colleagues from a different gender or religion.

Time wastage or reduced productivity by employees have been found in the literature to be a problem in the workplace as the boundaries between life and work is blurred (Leftheriotis, & Giannakos, 2014). Organizations need to put in place and enforce policies about the use of social media at work (North, 2010). However, literature has also suggested that social media adoption in organizational settings had not kept up with the empirical understanding of these technologies which makes it challenging to develop policies that adequately address the use of social media in the workplace (Treem, & Leonardi, 2012). The adverse outcome of social media use in the workplace is that employees may stop using social media or feel ashamed and demotivated which will ultimately impact on productivity.

To safeguard against such threats, Dreher (2014) advises organizations to pay attention to issues through the implementation of policy governing social media usage in organizations. Part of the management of social media in the workplace is a social media policy that governs the use of the technology by the employee. Mushwana and Bezuidenhout (2014) surveyed a variety of South African companies in the public, private and government sector to establish how many companies have a social media policy. The results showed that only 35% of the companies had a policy in place, of which only 60% was operational. The policy should be accompanied by both punitive and corrective measures when violations occur (Hysa, Mularczyk, & Zdonek, 2015). Despite the legal right of the organization to conduct this monitoring, the employees often see this as a violation of their privacy. Lanham (2010) reported that while 60% of CEO did state that they had the right to monitor the social media activity of their employees, only 17% had some program to monitor and mitigate the potential risks related to social networks. Organizations need to carefully consider how they need to manage social media in the workplace.

Conclusion

Literature that investigate how social media influences the academic organizations in South Africa is limited. Much has been written about social media that is used for teaching and learning, but the influence in the workplace amongst employees has not been addressed. The most significant findings in this study include that employees are concerned when they use social media if they perceive it to be offensive, waste time and damage relationships within the workplace. This is important as social media can decrease the productivity of the workers and cause a negative working environment amongst workers. Reputational damage that is caused by social media use in the workplace was not a concern among employees.

Limitations of the study include the small sample size and self-reported bias. The study was also conducted at one university, which means the results may not be generalizable to other institutions in South Africa. Future research could include a bigger sample size from across the various traditional universities in South Africa to produce a more comprehensive result.

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Paper 10

Development of a Framework for a Knowledge Management Firm in the Fourth Industrial Revolution

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Abstract: Artificial intelligence, robotics, and the Internet of Things are some of the technologies that are reshaping economies and business ecosystems, including the manner in which business is conducted in the fourth industrial revolution. A knowledge management firm needs to adapt its business model and commercialization lifecycle for successful business in the fourth industrial revolution. The research was exploratory in nature. By applying qualitative research methodology, critical case sampling were selected, through which business cases went through a structured content analysis process to determine the top business cases, later used for the interviews process. Three strategic information managers were selected from the top business cases, to participate in in-depth face-to-face interviews. An information and knowledge management framework was developed, with Research as a Service as the key service offering. Within Research as a Service, 5 IKM elements and 25 criteria are embedded, on which the new framework is based. The results found that the development of a customized commercialization lifecycle, business model canvas, new services and a framework specific for a knowledge management firm in the fourth industrial revolution is crucial. The paper submits recommendation for an information and knowledge management framework in the fourth industrial revolution and adds value to business management literature at a time in which businesses are drastically adapting to be relevant in the fourth industrial revolution.

Keywords*: Business model canvas; commercialization lifecycle; fourth industrial revolution; information and knowledge management framework; Research as a Service*

1. Introduction

The fourth industrial revolution (4IR) represents many opportunities and challenges to businesses. In order to stay competitive in the 4IR, knowledge management (KM) firms require new commercialization lifecycles (CLCs) and business models. With the emergence of the 4IR, professional business consulting firms, especially entrepreneurs and small businesses will have to invest on educating themselves, on how to transform and remain competitive in the new 4IR (Quain, 2018; Saratoga, 2018). "Small and medium-sized enterprises (SMEs) are the backbone of most economies" (Issa, Lucke & Bauernhansl, 2017). KM firms need to adapt their existing CLCs and business models, to take advantage of opportunities in the 4IR. The 4IR was announced and recognized in Germany in the year 2011; it would be beneficial for professional business consulting firms, especially entrepreneurs and small businesses, to proactively understand what is required of a business to remain competitive in the 4IR. Over the past couple of years, a rise in the growth and development of technologies of the 4IR has been seen, specifically, Artificial Intelligence (AI), the Internet of Things (IoT), and robotics. Various economies and organizations have realized the need for upskilling for the 4IR and have started to invest in such efforts (Schwab, 2016a).

The objectives of the research was to, develop an information and knowledge management (IKM) framework that can be used by KM firms to successfully conduct business in the 4IR; further developing a new innovative service for the KM firm. Schwab (2016a), notes that the 4IR is primarily characterized by a range of new technologies, such as AI, IoT and robotics, through which the interconnectedness of physical, digital and biological worlds will be seen; with a direct impact on all economies, businesses and industries. With the 4IR bringing the colossal change as depicted by Schwab (2016a), it is imperative that new frameworks for conducting business are adopted.

In this paper, the methodology section precedes the literature review section thereby emphasizing the process of developing the IKM framework.

2. Literature Review

The development of an IKM framework for a KM firm in the 4IR, required that literature be thoroughly reviewed aiding in the selection of the 5 IKM elements and 25 criteria embedded in the IKM framework. The 25 criteria exist under the 5 IKM elements namely: 1) components of a commercialization lifecycle, 2) components of the business model canvas, 3) features of digital business transformation, 4) features of the 4IR, and 5) principles of strategic information management.

Components of a commercialisation lifecycle (CLC)
Commercialization has many different definitions in the literature. Commercialization is "the process of developing a product from concept, through feasibility and implementation, to its successful introduction into a given market," says McCoy (2007), while Heffernan (2010) says "in business life, the innovation has to be turned into a product. The process of turning an idea or an innovation into a product is productisation. The product or service can then be commercialized". Heffernan (2010) also puts emphasis on innovation as being part of the commercialization process. Razak, Murray and Roberts, (2014) explain that "commercialization success is about converting ideas and new innovations into new marketable products". Many researchers view commercialization as a process, with new innovation being introduced into the market. New innovation can be a product and or a service (Bers, et al, 2008; Razak *et al.*, 2014; Cannatelli, *et al.*, 2017).

Understanding what commercialization is, and what the importance of commercialization for a profit driven business is; is central to understanding the CLC's Research stage. Razak *et al.*, (2014), emphasize that commercialization is a process, meaning that various stages exist within a CLC. No specific CLC exists that caters for and is suitable for all organizations and contexts (Ismail, Nor & Sidek, 2015), therefore a unique CLC is adapted for the IKM framework.

Idea generation
Idea generation is crucial for innovation, which is the starting point and first stage in the CLC (Foss, Pedersen, Pyndt & Schiltz, 2013; Dehghani, 2015). Innovation is not a specific stage in the CLC; however innovation is important for idea generation, which is important for innovation (Ojasalo & Ojasalo, 2018a; Ojasalo & Ojasalo, 2018b). Furthermore, Gurtner and Reinhardt (2016) believe that "idea generation is the most important part of the innovation process because it is the starting point".

Research
Research is done to understand the feasibility, eligibility and appetite for the idea (to become a service) in any given market (Bansi, 2016; Khumalo & Du Plessis, 2017; Ojasalo & Ojasalo, 2018a). Thorough research can further reveal if the market is ready for such a service and determine if any competitors operate in the market, if any at all (Ojasalo & Ojasalo, 2018b). According to Moore (2009), "once a new idea or solution to a problem is recognized, that invention's viability must be researched and protected either with patents or secrecy".

Concept development and testing
Depending on the type of business, concept development and testing differs from business to business and economy to economy (Drucker, 1992; Drucker, 1993, Moore, 2009; Kotter, 2012; Watson, 2017). During the third stage of the CLC, concepts are developed and tested to determine which concept has the potential to move forward in the CLC.

Analysis
In the analysis stage of the CLC, many ideas have been looked at, with only a few ideas remaining, as all the ideas have gone through a filtering process (Bansi, 2016). The analysis stage forecast the market demand, costs (production) involved, and the sales and profits (Ojasalo & Ojasalo, 2018a). Analyzed results will provide valuable intelligence on what the target market expect (Jordan, 2010; Illbury, 2012).

Product or service development, market testing and marketing
During the product or service development, market testing and marketing stage, the actual product or service is developed as a prototype (Moore, 2009; Razak *et al.*, 2014, Bansi, 2016). The prototype is offered to a group of clients, during which clients scrutinize the prototype. Product or service development, market testing and marketing allow for improvement of the prototype, basically having the prototype in a loop in this stage, until the prototype is transformed into the actual product or service (Furr & Dyer, 2014; Watson, 2017).

Commercialisation
Once the development of the product or service is complete, the product or service is sold at a price to the target market as was established in the Analysis stage. Innovation can be commercialized successfully to the market, leading to improved income streams (Latif, Abdullah & Jan, 2016). At this stage the product or service is sold, and a profit is generated. The process of commercialization "is a cycle whereby a given input passes through a series of stages to reach a specific output and in every stage some value is added to it" (Dehghani, 2015).

Components of the business model canvas (BMC)
"A business model describes the rationale of how an organization creates, delivers, and captures value" (Osterwalder & Pigneur, 2010; Ojasalo & Ojasalo, 2018b). Nine building blocks are found in the BMC, namely; 1) customer segments, 2) value propositions, 3) channels, 4) customer relationships, 5) revenue streams, 6) key resources, 7) key activities, 8) key partners, and 9) cost structure. These building blocks are discussed below.

Customer segments
"The customer segments building block defines the different groups of people or organizations an enterprise aims to reach and serve" (Osterwalder and Pigneur, 2010; Ojasalo & Ojasalo, 2018b). The customer segments building block for the KM firm include; Government Institutions, Private Companies, Small Businesses and Entrepreneurs. The KM firm focuses on the above as its core customers, with a view that a beneficial and mutual relationship can be maintained. Customers are core to the KM firm, which results in profitability. "In order to better satisfy customers", the KM firm will group the customers into "distinct segments with common needs, common behaviours, or other attributes" (Osterwalder & Pigneur, 2010). The KM firm has to ensure that the business model is designed around "a strong understanding of specific customer needs" (Osterwalder & Pigneur, 2010).

Value propositions
"The value propositions building block describes the bundle of products and services that create value for a specific Customer Segment" (Osterwalder & Pigneur, 2010; Ojasalo & Ojasalo, 2018b). The value proposition (VP) sets the KM firm apart from its competitors. The VP offers something unique to the customer, it solves a customer's problem and provides a product or service based on the customer's need.

Channels
"The channels building block describes how a company communicates with and reaches its customer segments to deliver a Value Proposition" (Osterwalder & Pigneur, 2010; Ojasalo & Ojasalo, 2018b). The channels for the KM firm include the KM firm's; Website, Social Media, Direct Selling processes, and Referrals from the KM firm's network. Channels are crucial to the KM firm, as it is the point where the business interacts with the customer or potential customer.

Customer relationships
"The customer relationships building block describes the types of relationships a company establishes with specific customer segments" (Osterwalder & Pigneur, 2010; Ojasalo & Ojasalo, 2018b). The KM firm will ensure customer relationships are maintained through Client Relationship Management, dependent on project timelines (weekly, monthly). This can be face-to-face, telephonic, or automated engagement.

Revenue streams
"The revenue streams building block represents the cash a company generates from each customer segment (costs must be subtracted from revenues to create earnings)" (Osterwalder & Pigneur, 2010; Ojasalo & Ojasalo, 2018b). Every project determines the revenue stream, based on the size and duration of a project. Resources working on a project will also have a determining factor on the revenue streams. Possible Revenue Streams for the KM firm will be determined based on the resources required for a specific project.

Key resources
"The key resources building block describes the most important assets required to make a business model work" (Osterwalder & Pigneur, 2010; Ojasalo & Ojasalo, 2018b). Any business requires resources to function optimally, specifically for the KM firm the Key Resources are; Human Resources (Researchers), Physical Assets (computers, data services, transportation). Researchers are insourced, who will be the primary resource for the KM firm.

Key activities
"The key activities building block describes the most important things a company must do to make its business model work" (Osterwalder & Pigneur, 2010; Ojasalo & Ojasalo, 2018b). The key activities for the KM firm is the RaaS.

Key partners
"The key partners building block describes the network of suppliers and partners that make the business model work" (Osterwalder & Pigneur, 2010:38; Ojasalo & Ojasalo, 2018b:73). The KM firm's key partners include; Universities (Academic Researchers), Research Institutions, Entrepreneurs, and Small Businesses.

Cost structure
"The cost structure describes all costs incurred to operate a business" (Osterwalder & Pigneur 2010; Ojasalo & Ojasalo, 2018b). The KM firm is initially funded by the founder, however additional funding is required to expand the business operations. The KM firm was initially funded by the founder for Marketing, Branding, and Sales. Second round funding is required, to expand on Human Resources, and improving the RaaS and the RM^{VP} (Value Proposition to render services).

Features of digital business transformation (DBT)
According to Schwertner (2017), the use of new technologies for the development of new business models, new business processes, new workflows, new technologies, new software, new systems and new services; leading to the improvement of business operations and efficiency; further resulting in greater profit generation for the business, can be defined as digital business transformation (DBT). Before DBT can take effect in any business, there are prior processes that needs to take place, namely digitization and digitalization.

Digitisation
According to Gartner (2018b), the process of changing anything from analog to digital, is defined as digitization. In the context of a business, digitization is the same. It is the process of automating or changing, physical or paper-based processes, from analog format to digital format. Digitization occurs for instance, when physical records (such as, paper, film, audio) are put through a process to transform from physical (analog) format to digital format. For instance, the scanning of a physical image through the use of a scanner, into a digital image (Moss, *et al.*, 2015). In the context of a business, for example a library, in the past librarians had to physically add book information into the library book register. The process of digitization allowed for books to be assigned a special barcode. The barcode would be scanned, through the use of barcode scanning technologies. The library book register would be populated with the information of the book automatically. This in turn ensures that a database of all the books in the library is kept and maintained.

Digitalisation
According to Gartner (2018a), the process of moving to a digital business, through the use of digital technologies, is referred to as digitalization. In the context of a business, it is the process of improving, or

enabling, and or transforming current business operational processes, through the use of digital technologies. Leveraging digitized (from the digitization process) data to do digitalization. Digitalization occurs for instance, when a physical process is transformed into an automated digital process. In the context of a business, for example a library, the book check-out process was put through digitalization. In the past, a user would check-out a book through the librarian, who would put a physical stamp or signature and date of return on an index card inside the book. After digitalization, a library user can check-out a book, through the use of a self-check-out machine. The machine scans the barcode of the book and a receipt is printed for the user, with information of when the book should be returned. Digitized (from the digitization process) data was leveraged, to transform the physical process into an automated digital process.

Digital business transformation
The features of DBT made up 4 of the 25 criteria in the IKM framework, namely; 1) innovation is key to the organization, 2) big data are embedded in the organization, 3) business process automation is found in the organization, and 4) information security is key in the organization. According to Perkin and Abraham (2017) "heightened pace and progression through broad and proficient adoption and application of digital-native processes including design thinking, agile and lean, continuous experimentation and a culture that supports constant testing and learning, coupled with an exhaustive, customer-centric **innovation** process that enables rapid origination, validation and commercialization of ideas", relates to agility leading to innovation as key in the organization. The KM firm ensures that innovation is embedded in the RaaS process. The RaaS process should in turn generate innovative results for the customer. The RM^{vp} is thus achieved for the customer, ensuring that the customer is competitive in the 4IR.

In the DBT process, enormous amounts of data is produced, constituting **big data** (Geng, 2017). "Data-driven decision-making is essential in the agile business. Data is central to the flow of knowledge into and within a business, to governance processes, performance optimization and customer experience delivery" explain Perkin and Abraham (2017). Many organizations struggle with big data, in that the organization is unable to make sense of the big data (Marr, 2017). It is therefore important for the KM firm to ensure that it is able to provide RaaS in such a manner, allowing for the customer to make sense of the big data in the organization (customer). This leads to the customer leveraging on the 4IR, as big data is the backbone for technologies to be effective in the 4IR. According to Perkin and Abraham (2017), "**business process automation**, to communication and notification systems, customer service interaction, marketing automation and lead management, workflow automation can bring powerful efficiency benefits", to the organization. Business process automation, however, does not mean that every process will be automated, as human intervention will be required when for instance formulating a strategy (Nakamura & Zeira, 2018). With regards to the KM firm, RaaS should be offered in a manner which will allow for the customer to automate certain processes but be able to keep the human aspect embedded for certain processes and function, such as strategy development.

Information security is crucial for any organization operating in the 4IR and specifically for the KM firm, when offering RaaS or any other service to customers, the KM firm will have to ensure that information security is addressed according to appropriate laws and legislation geared for the 4IR.

Features of the fourth industrial revolution (4IR)
Founder and executive chairman of the World Economic Forum (WEF), Klaus Schwab, explains in his book that humankind like never before, are in a revolution that will change the everyday lives of humanity (Schwab, 2016a), and this revolution is known as the 4IR (Schwab, 2016a). In some instances, also referred to as Industry 4.0 (Magruk, 2016), with existing Industry 4.0 literature depicting that KM and decision making strategies are crucial factors for organizations (Abubakar, *et al.* 2017); the 4IR will bring colossal change to the world, in various economies, businesses and private life, which will happen at a much faster rate than ever anticipated or experienced in history (Schwab, 2016a). The features of the 4IR made up 3 of the 25 criteria in the IKM framework, namely; 1) artificial intelligence (AI), 2) robotics, and 3) the Internet of Things (IoT). The features of the 4IR is discussed below.

Artificial intelligence (AI)

Makridakis (2018), explains that AI will have the most profound effect on firms and employment in the immediate future, "for it is in the world of business, manufacturing, commerce, and government that AI will likely have the most profound effects on our lives, for good and ill" (Makridakis, 2018). Skilton (2017), explains that AI technologies will provide new opportunities and a competitive advantage in the market for the business. The KM firm needs to take advantage of these new technologies, allowing for greater service delivery to customers.

The Internet of Things (IoT)

"The Internet of Things is a system consisting of networks of sensors, actuators, and smart objects whose purpose is to interconnect 'all' things, including every day and industrial objects, in such a way as to make them intelligent, programmable, and more capable of interacting with humans and each other" (Geng, 2017). In the 4IR the KM firm needs to take advantage of the fact that everything is connected through the IoT. This allows for collection of valuable data that can be used to make predictions about customers and future scenarios – referred to as predictive analytics.

Robotics

"Robotics is the industry related to the engineering, construction and operation of robots – a broad and diverse field related to many commercial industries and consumer uses. The field of robotics generally involves looking at how any physical constructed technology system can perform a task or play a role in any interface or new technology" (Technopedia, 2018). Businesses and economies are being disrupted by new technologies in the 4IR, to an extent where the loss of jobs are becoming a concern, due to robotics. Businesses and economies will have to adapt current business models; providing skills development to those who are in the path of jobs being lost due to robotics.

Principles of strategic information management (SIM)

Strategic information management (SIM) is defined as a situation in which "information and related resources [...] are used or utilized by an organization (profit or non-profit) to support, implement or achieve strategic position in order to gain competitive advantage/strategic advantage" (Hussin, Hashim & Yu, 2018). Based on the assertions of Huggett, Hoos and Rensink (2007), Mutula and Wamukoya (2007), Davenport and Patil (2012), Zulu, Sebina, Grand and Mutula (2012), and Bwalya and Saul (2014), four timeless principles for SIM have been identified for this study, namely; 1) information is a key asset to the organization, 2) information is integrated in the overall strategy of the organization, 3)information is managed strategically in the organization, and 4) information is crucial to the success of the organization. These four timeless principles made up the remainder of the 25 criteria in the IKM framework.

Information is a key asset to the organisation

Many researchers agree that the first principle, 'information is a key asset for any organization', is an important factor adding to competitive advantage (Galliers & Leidner 2003; Bruening, Sotto, Abrams & Cate, 2008; Galliers & Leidner, 2014; Galliers & Stein, 2018; Hussin, *et al.*, 2018). Information is a key asset and should be managed strategically. In terms of the KM firm offering services to its customers; the KM firm needs to ensure that information is managed strategically as an information asset that is key to the customer's competitive advantage in the 4IR.

Information is integrated in the overall strategy of the organisation

The second SIM principal, states that 'information is integrated in the overall strategy of the organization', and according to Hussin *et al.* (2018), SIM begins with mastering and understanding how to think strategically. During the SIM process, a strategic plan is developed, implemented and assessed for effectiveness. As a combination of strategic management and information management, SIM is crucial for an organization, to achieve organizational objectives. With regards to the KM firm's service offering, it should offer RaaS strategically to customers, making sure that information is integrated in the overall strategy of the organization.

Information is managed strategically in the organisation

The third SIM principle, 'information is managed strategically in the organization', resonates with the declarations of Galliers and Leidner (2003), Dearstyne (2004), Bruening *et al.* (2008), and Hussin *et al.* (2018). Information should be managed strategically, taking into account that people and technology are key in the strategic management of information. Bruening *et al.* (2008), further states that "managing information strategically not only mitigates risk, it shapes decisions about data to assure that this critical resource is available to the appropriate personnel when needed. It fosters sound investment in data and data systems that meet the diverse needs of the business". With the support of technology, SIM adds to the overall competitiveness of an organization through the alignment of organizational objectives with SIM objectives.

Information is crucial to the success of the organisation

The fourth and last SIM principle, 'information is crucial to the success of the organization' is supported by Galliers and Leidner (2003), Bruening *et al.* (2008), Iuga and Kifor (2014), and Hussin *et al.* (2018). They agree that the fourth principle leads to a competitive advantage for an organization. Information is used strategically, aligned to the objectives of the organization, giving the organization a competitive advantage over competitors. The KM firm needs to ensure that; when offering services to customers, information managed strategically should be instilled in the business models of customers. Having discussed the 5 IKM elements that is core in the IKM framework; the service offering, namely Research as a Service (RaaS) will be discussed.

Service offering – Research as a Service (RaaS)

Research conducted in the CLC, leads to the design of the service offering (Watson, 2017). The service offering is referred to as Research as a Service (RaaS). The primary service the KM firm offers is Research; RaaS constitutes a major component of the service offering, estimated 80% of the service offering according to the director of the KM firm. Other services that are offered by the KM firm makes up 20% of the service offering. For purposes of the study, there was only focused on the RaaS. The value proposition of the RaaS is discussed below.

Research Methodology Value Proposition (RM^{VP})

The RaaS offered by the KM firm is the competitive edge of the business. The actual value proposition is known as the Research Methodology Value Proposition (RM^{VP}), not to be confused with the Research Methodology of the study. The RM^{VP} is the method or process in which RaaS is conducted or offered, adding the value proposition perspective to the service offering. The IKM framework sets out a guideline that can be used by a KM firm to offer the RaaS to clients. The IKM framework has a direct link to the RM^{VP}, as the IKM framework is the value proposition that is added to the RaaS.

3. Methodology

The process of developing a framework meant that certain IKM elements and criteria had to be determined and ranked. Ranking was performed by means of a Nominal Ranking Technique (NRT). The NRT process allowed the researcher to determine through the 5 IKM elements with 25 criteria, listed in Table 1 below, which BCS contained some of the 5 IKM elements with 25 criteria and which BCS does not. The more IKM elements and criteria a BCS contained, the higher the ranking for the BCS. The Five IKM elements and 25 criteria was derived from an extensive literature review. Multi-method qualitative research was used for the study, relevant as content analysis of 101 Strategic Information Management business case studies (BCSs) was done. Following on the content analysis of the BCSs, interviews were conducted with strategic information managers. From the 101 BCSs, 4 top BCSs were selected, which went through the NRT process. NRT was used to rank BCSs based on importance. Table 1 lists the 5 IKM elements and 25 criteria.

Table 1: Five IKM elements and 25 criteria

		#Criterion
ELEMENT 1: Components of the CLC		
Criteria	1. Idea Generation	**1**
	2. Concept Development / Testing	**2**
	3. Analysis	**3**
	4. Product Development & Market Testing	**4**
	5. Commercialization	**5**
ELEMENT 2: Components of the BMC		
Criteria	1. Customer Segments	**6**
	2. Value Propositions	**7**
	3. Channels	**8**
	4. Customer Relationships	**9**
	5. Revenue Streams	**10**
	6. Key Resources	**11**
	7. Key Activities	**12**
	8. Key Partners	**13**
	9. Cost Structure	**14**
ELEMENT 3: Features of DBT		
Criteria	1. Innovation is key to the organization	**15**
	2. Big Data are embedded in the organization	**16**
	3. Business process automation in the organization	**17**
	4. Information security is key in the organization	**18**
ELEMENT 4: Features of the 4IR		
Criteria	1. Artificial intelligence is a key consideration for the organization in the 4IR	**19**
	2. The Internet of Things is a key consideration for the organization in the 4IR	**20**
	3. Robotics are considered as present or future business importance	**21**
ELEMENT 5: SIM principles		
Criteria	1. Information is a key asset to the organization	**22**
	2. Information is integrated in the overall strategy of the organization	**23**
	3. Information is managed strategically in the organization	**24**
	4. Information is crucial to the success of the organization	**25**

A purposive sampling technique, namely critical case sampling, was used to select the top BCSs. Once the top 4 BCSs had been identified, the originators of these BCSs became the 4 participants of the interviews. From the 4 participants, 3 were interviewed and the business website of the fourth participant was used to test the findings from the interviews and the content analysis of the BCSs. This was done through the Data Analysis Spiral technique, which according to Creswell (2013), is not a set process, but is rather customized for the specific research.

4. Results and Discussion

The above literature review provides a reference point for this paper's discussion of the research findings. This section elaborates on the findings of the multi-method qualitative research that was used in the form of content analysis and interviews. Literature review inference is that the 4IR is taking effect faster than anticipated and will have global impacts on business models, businesses and economies. New disruptive technologies in the 4IR entail the development of new and innovative services offerings, adding to overall competitiveness. Should businesses not adapt and change their business models to cater to needs in the 4IR, businesses will collapse. It is imperative for a KM firm to change current business models and adapt new commercialization efforts for the 4IR. This will allow the KM firm to offer new and innovative service offerings, referred to as RaaS with a unique value proposition, named the RM^{VP}.

The content analysis of 101 Business Case Studies (BCSs), allowed the researcher to scrutinize the BCSs to understand the uniqueness of a BCS. Understanding the uniqueness allowed for the Nominal Ranking Technique (NRT), leading to the selection of BCSs to make up the top 4 BCSs. As a result of identifying the top 4 BCSs, the researcher was able to conduct the interviews. The top 4 BCSs were used as the 4 participants for the interviews in the study. Three participants were interviewed through an in-depth face-to-face interview and the fourth participant's business website was used to test the findings of the interviews and the content analysis of the BCSs through triangulation. During the interviews conducted with the 3 participants, 18 open-ended questions were asked. The last question asked to the participants was "In your opinion, do you think the 5 IKM elements and 25 criteria should be in place as a framework for businesses, specifically KM firms?"

All three participants responded positively, as follows:

Participant 1	Participant 2	Participant 3
"I think it is good that there is a combined framework, and that you can pick and choose from the framework. Somebody might not use the whole business model canvas, but they might use elements of that, and if a KM consulting firm can use it according to their needs. This is for me important; it needs to be adaptable within that specific environment and that specific need. Also, based on the nature of the business".	"Very important. For a KM consulting firm, it could even help to solution better in terms of consulting. It can help to solution another business better, in terms of helping a client's business to think of stuff they haven't been thinking of. It's important, all the elements and criteria; especially the CLC for the KM consulting firm. Your services are only as important, when you can diagnose my business accordingly and also solution my business accordingly".	"Yes, they should be. I am thinking of an offering to clients, if the client solution talks to all these things, I think for me you would have nailed it. If KM consulting companies can offer something like this, cover all these, you should be – actually differentiated. Because, most consulting companies offer one or two of these, or only one of them. So, if it is part of, sort of package for clients, I think you are on the money".

Based on the results from the interviews conducted, where it was determined that a new IKM framework is needed, the new IKM framework was developed, illustrated and discussed below.

Figure 1: Developed IKM framework (Source: own figure developed for this study)
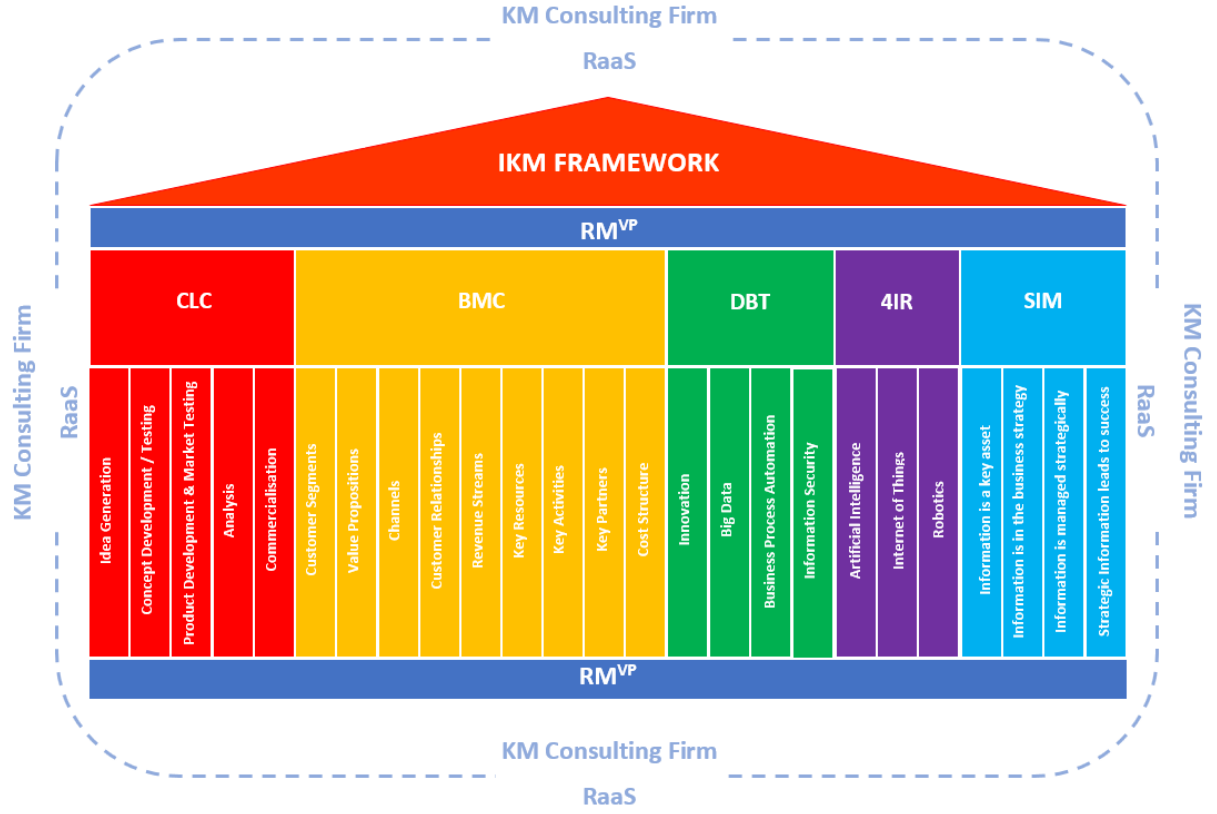
The proposed IKM framework is housed in the RaaS of a KM firm. A KM firm can use the IKM framework when rendering RaaS to clients. RMVP is embedded in the entire IKM framework. The outer layer of the IKM framework shows the RaaS in the KM firm, which is the service offered by the KM firm. Within the RaaS in the KM firm, the RM^{VP} is found, which is the value added to the RaaS; a method or process in which RaaS is conducted or offered to clients. The 5 IKM elements and 25 criteria are embedded in the RaaS. The KM firm renders RaaS to a client, making use of the IKM framework as a guideline for implementation in the client's business, relevant for the 4IR. The RM^{VP} is added to the RaaS through the 5 IKM elements and 25 criteria. In the event where there are only certain IKM elements and criteria of the IKM framework in a client's business, the IKM framework should be used to guide the implementation of the missing 5 IKM elements and 25 criteria. When working with clients, the KM firm will assess the client's business to determine if any of the 5 IKM elements and 25 criteria are present in the business ecosystem. Ideally all 5 IKM elements and 25 criteria combined, is the ultimate goal towards success. If any of the 5 IKM elements and 25 criteria are non-existent in the client business, the KM firm needs to guide and advise the client on what needs to be implemented. The 5 IKM elements and 25 criteria for the CLC, the BMC, DBT and SIM are straightforward in terms of implementation, meaning that it is easier to grasp and implement. In terms of the 4IR element and criteria; AI, IoT and robotics implementation can be challenging due to the relative infancy of the element.

5. Conclusion and Recommendations

The IKM framework does not follow a specific order in which the 5 IKM elements and 25 criteria should be implemented in a business. Businesses differ; therefore, implementation will depend on the needs of the business at that point in time. The newly developed IKM framework for a KM firm in the 4IR offers a unique value proposition to KM firms, allowing for KM firms to remain competitive and innovative in the 4IR, together with being able to render competitive and innovative services to clients in the 4IR. In order for a KM consulting firm to achieve competitiveness in the 4IR, it is recommended that the IKM framework should be used as suggested. The application of the IKM framework could be beneficial to other types of businesses as

well, keeping in mind that the implementation and application of the IKM framework will differ from business to business, based on the needs of the business. The implementation and application of the IKM framework will be beneficial also to entrepreneurs, small businesses and professional business consulting firms.

Further research areas were identified, through the insights gained from the study. The study focused specifically on 5 IKM elements and 25 criteria, based on the literature for the conceptual framework. To expand the IKM framework, to extensively include and cater for all business types, research can be done to determine if more than 5 IKM elements and 25 criteria should be included. Further, on the point of inclusivity of other IKM elements and criteria; research can be done to determine if the 4IR element and criteria should be broadened. For example, the World Economic Forum works in 39 different areas under the 4IR, which increases constantly. Further research in this area of the 4IR is definitely needed, as the world moves towards the implementation, application, effects and consequences of the 4IR.

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Paper 11

Leaking pipeline' as experienced by African women in academic leadership within South Africa

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Abstract: African women in academic leadership within the South African Higher Education landscape are still marginalized irrespective of supportive legislation. The purpose of this paper is to explore and identify the organizational factors leading to a 'leaking pipeline' as experienced by African women in academic leadership within South Africa. A qualitative approach was used to gather data from 10 purposively selected women in senior leadership positions within Higher Education public institutions. The participants had to be black African women in positions of academic leadership. Face-to-face interviews were conducted, and the inductive approach was used to organize the data into themes. Participant narratives and interview responses yielded findings inclusive of patriarchal leadership structures; socio-cultural barriers; stereotypes and biases; lack of support for African women in leadership and organizational culture, where African women are often not viewed as suitable or equals in academic leadership. The sample of the study is only a snapshot of the female population in academic leadership in Higher Education institutions (HEI); therefore, further research involving all HEIs is needed to expand on the study. The findings of this study add weight to the increasing call for HEIs to put in place efforts to transform institutional structures and mind-sets to eliminate all types of gender bias. The study broadens awareness of the gender leadership gap in academia and goes beyond to include the issue of inclusion/race/ethnicity into the already complex literary topic.

Keywords: *Academic work environment, African women, diversity and inclusion, organizational culture*

1. Introduction

The world over, women account for nearly half of the workforce (Cabrera, 2009). Professional women are entering the workforce at the same rates as men. Yet the statistics indicate disproportionate lower numbers of women advancing to senior and leadership positions (Surawicz, 2016). International research shows that at every successive management level, significant proportions of talented women drop out or stagnate below senior management and top leadership positions, a condition known as the 'leaking pipeline' (Desvaux, Devillard & Sancier-Sultan, 2010). Concerns about the scarcity of female corporate executives have been raised. Feintzig and Lublin (2016) published an article in The Wall Street Journal which read "Female CEOs still a rarity, Face extra pressures"; while Egan (2015), reporting for CNN, another media outlet, ran a news headline titled, "Still Missing: Female Business Leaders". In academia the scarcity of especially African women in executive and leadership positions within South African Higher Education institutions (HEI) is noticed. Earlier research done in the UK indicates that the underrepresentation of women in leadership positions is due to themselves as a result of their 'missing agency'. However, further research on agency, in women progressing in academia, has been found to be untrue in Western societies (Shepherd, 2017). It was found that the academic organizational environment plays the pivotal role in their success, and not the individual aspect of agency.

The purpose of this paper is to explore and identify the organizational factors leading to a 'leaking pipeline' as experienced by women in academic leadership within South Africa and to propose possible solutions in support of career advancement and lowering intentions to quit. Before the questions can be answered, the literature will be reviewed to identify the possible organizational factors that may make the workplace inhospitable, and then make use of the responses from participants selected for this research to elaborate on the issues as experienced by them and which will affect their intention to quit from academia.

Problem statement

History, as well as international research by Catalyst (2004) and McKinsey & Company, (2010) has repeatedly shown the value that female leaders add to their organizations, but barriers exist in the advancement of academic women at work. Research also shows that this failure to advance is not because women lack ambition, but rather, the opposite is true that many professional working women aspire to be leaders of organizations, but this statement of intent, however, is stated with hesitancy, citing the phrase *'as women…'* (KPMG, 2015). It is evident that women aspire to lead, but it appears as though there is something that is holding them back, and keeping them in the lower ranks of organizational hierarchy (Shepherd, 2017). Thousands of books and articles that address this issue have been written; offering theories and giving advice to individual women on how to stand up, step up, lean in, and make their voices heard; yet the leadership gender gap remains significant, persistent, and systemic (Hill, *et al.*, 2016).

The general problem is that women seem to be getting lost on the way to the top; many women in leadership are reportedly leaving the workplace citing inhospitable work environments (Wohlbold & Chenier, 2011). More specifically the problem in South Africa is that many women academic leaders in Higher Education institutions are not from South Africa, but from other African countries who all experience organizational factors that impact their career advancement and affect their intention to quit. This leads to the formulation of the following research questions:

- What organizational factors cause the loss of African women academics in leadership positions in South Africa?
- How can the loss of African female leaders in academia within South Africa be reined in?

2. Literature Review

Inhospitable work environment

An inhospitable work environment is a workplace that is difficult to work in, is unwelcoming and unfriendly. Any healthy organization would ordinarily want to benefit from a workforce that is easily prepared to articulate their ideas concerning organizational problems, activities, as well as share ideas, information and knowledge. However, the voices of female employees, particularly those in leadership positions, are not being heard articulating their ideas concerning organizational problems or activities (Fapohunda, 2016. Research on women's experiences in the workplace, as well as on what they want out of an ideal workplace environment has established key findings among which are; the need to work for organizations that help them find their calling; flexibility in where, when, and how they work as well as organizations that offer them leadership opportunities, together with the resources and the support that is required to make these opportunities successful as well as support for work and family life, (Clerkin, 2017; Santana & Pappa, 2015).

More diversity in the type of people involved in leadership is often used as a proxy for more diversity of thought in leadership. (Williamson & Wilkie, n d). However, in this diversity, the issue of race/ethnicity adds a greater layer of complexity as well as other biases in women's access to and achievement of leadership positions (Chisholm-Burns; *et al.*, 2017). Existing research overlooks the experiences of women of colour in leadership (Hill, 2016). Women face several overlapping barriers to leadership roles, but this particular research narrows this perspective down to zoom in on African women in leadership positions in a South African HEI and puts under the spotlight their minimal organizational representation. The United Nations, (2011) notes how there is a paucity of women's equity in the workplace. It appears as though the African women in positions of leadership are incapable of participating in the same way as their male counterparts (Solnit, 2017; Mahasha, 2016). This issue of non-participation at work is pertinent to their propensity to quit.

Women and leadership

Women are still largely excluded from the most powerful corporate positions in our economy (Miller & Vagins, 2018) yet there is compelling international evidence that gender balance in leadership roles correlates with better decision-making, organizational resilience and performance (Ministry of Women Affairs, 2013). A high-level leadership position includes positions that contribute substantially to managing and directing the course of an organization, such as CEOs, senior or executive vice presidents, chief financial or operations officers, and others (Miller & Vagins, 2018).

Greater numbers of women in organizational leadership leads to a wider lens of strategic thinking; more diverse skills and experiences are brought to the decision-making table, enabling groups or divisions to be more capable of weathering problems and issues better, as well as identify innovative solutions faster (Deloitte, 2017; Williamson & Wilkie, n d). Women provide diverse business perspectives in decision-making; they focus on different things and have a different approach to risk, which in turn leads to improved performance and offers greater competitive advantage (McKinsey & Company, 2010). Women employees have ideas, information and opinions that can provide constructive ways to improve work and work organizations; theirs would be an important voice in the governance of their organizations, communities and their nations (Mizrahi & Fraser-Moleketi, 2015). The fact that organizations are losing women in senior management positions means they are losing out on profits as well as on competitive advantage (Taneja, Pryor & Oyler, 2012)

African women and leadership
The role of African women in developing the economies and societies of African countries cannot be overlooked as they are critical agents for enabling meaningful change on the continent. The fact that The African Economic Outlook (2017) mentions that Africa is one continent experiencing one of the fastest economic growth rates and highest returns on investment in the world means that both men *and women* need to be able to reach their full potential in order to maximize these growth opportunities. Women of colour in particular, (black women) are underrepresented in leadership (Miller & Vagins, 2018) and this under-representation in social, political and economic spheres must be addressed if Africa is to leverage the promise and potential that it holds.

The Network of Executive Women (2018) notes how women in upper management tend to experience the workplace differently from their male counterparts; they mention the fact that there is a disconnect between what women value and what most corporate cultures offer, resulting in women not feeling the fit in the same way as men do as they rise through the corporate ranks. Women bemoan inhospitable work environments (Wohlbold & Chenier, 2011), among which are cited stereotyping, gender bias and discrimination. This is explained in the social role theory which forms the theoretical base against which this research was carried out. In the face of stereotypes, women are propelled away from the organization, and with the propensity to exit appealing more strongly, they go through a cost-benefit analysis- to stay and weather the storm-or be quiet and move elsewhere (Kimeria, 2017). Beheshtifar, *et al.* (2012) therefore bemoan the lack of a level playing field for women.

A woman's path to leadership
The path to female leadership does not start when she's named to a position of power, but rather, it starts much earlier in life and is defined by childhood lessons and values received as well as the availability of positive leadership role models (KPMG, 2015). Two elements particularly stand out that will affect her ability to lead: confidence and connections (KPMG, 2015) and in their study, KPMG (2015) highlighted the importance of confidence and connections in influencing a woman's perceptions of leadership, mentioning that if as a child she was encouraged to lead, and was provided with a role model then the female child is more likely to progress in the path to leadership, but if the reverse is true, then she will harbour no ambitions towards leadership. Unfortunately, the socialization of the African Girl child does not afford her such moulding. From birth to adulthood, society has already defined who she is – a no-body, and this construction of an ideal female by the African society becomes ingrained in the very life blood of the African woman, to her great disadvantage.

Social Role Theory
Social role theory explains the relationship between individuals and organizations by focusing on the role they play. Thompson (2002) mentions how role behaviour is influenced by the way society expects women and men to behave. The world over, men are expected to be assertive, dominant, and authoritative, ***taking charge*** and women to be warm supportive, kind and helpfully ***taking care*** (Catalyst, 2007).

Further explanation by Thompson (2002) states how women's role in the home (doing household chores) is influenced by the society they live in. In most African cultures, women are expected to care for children, obey

their husbands, and generally run the household, while men are expected to be breadwinners. Women play these roles because society expects them to do so; they are a result of societal expectations. What a man or a woman does is linked the social role that each occupies, and not to their sex (Eagly, Wood & Diekman, 2000). In the context of this research, as also supported by Longman, Daniels, Bray and Liddell (2018) cultural expectations and in-built structures influence the beliefs, behaviours, and experiences of people within an organization with regards to expectations that they have of women. In the business domain, it becomes difficult for women to achieve success in leadership roles because this is not what is expected of them (Eagly, 2002). Social role theory implies that people have a tendency to doubt women's ability to hold certain roles, such as management positions (Eagly, 2013). It is the men who are viewed as naturally suitable for undertaking leadership roles. South African Board of People Practices (SABPP) (2013) notes how women who deviate from the gender stereotypes are perceived as disobedient and less attractive.

The African woman - a creation of society
Ebila (2015) chronicles how the social construction of womanhood in Africa is influenced by socio-cultural and patriarchal ideologies that construct the ideal African woman as the docile one, the one who does not question male authority. In fact, every social grouping in the world has specific traditional cultural practices and beliefs, some of which are beneficial to all members, while others have become harmful to a specific group (Maluleke, 2012), such as women in this particular research. By not questioning male authority, the woman is expected to be silent in the presence of men. At the workplace, Bogosian and Casper (2014) revealed four types of silence, namely: defensive, offensive, social and futility. The futile type of silence is of relevance to this research, and it is defined as that silence which is rooted in apathy and cynicism; it is disengaged behaviour based on resignation after being unable to make a difference (Van Dyne, Ang & Botero, 2003). This is also the silence practiced by female leaders as they experience the inhospitable work environment.

Research on cultures around the world by Hofstede, Hofstede and Minkov (2010) revealed that patriarchal systems have influenced, and still continue to influence issues of access and equity in all spheres of life, including the workplace culture. This meant that male dominance was upheld on one hand while on the other, female subordination was practised (Aina, 1998). The women found it hard to rebel because of traditional ideologies that they were socialized into (Busia & Abena, 1993; Parenzee & Smythe, 2003). These perceptions and the persistent assertions that the woman has no rights, no value and is not an equal with the male counterparts eventually forced them to conform to socially sanctioned and acceptable norms of their society (Ebila, 2015). Today, women employees in leadership opt to resign themselves to maintaining silence since it is difficult to transform masculinist patriarchal cultures (Sisulu, 2017). Developing a leadership mentality thus becomes difficult for women since they grew up getting fewer challenging assignments (McKinsey & Co, 2016). The cumulative effect of such negativities is that women develop less self-confidence and tend to view their gender as a barrier to advancement. (Chisholm-Burns *et al.*, 2017). Underlying currents of cultural forces exist, and if at all change is to be brought about, these need to be named and addressed.

Barriers to women's leadership
Barriers to women's leadership are numerous, expansive, and entrenched in the organizational and societal psyche (Chisholm-Burns *et al.*, 2017). The lack of gender balance in senior roles is a consequence of a range of external and internal barriers present in all areas of the public domain (OECD, 2016). Women are often absent from leadership roles such as chief executive officer (CEO), board member, president, and dean (Chisholm-Burns *et al.*, 2017). The working world is a man's world, where the workplace culture is 'male-normed' (Longman, Daniels, Bray, and Liddell, 2018). These barriers include, among others, patriarchal leadership structures, gender stereotypes, limited work-life balance and flexible working arrangements, as well as a lack of monitoring and accountability mechanisms to ensure the sustainability and policy-effectiveness of gender equality measures (OECD 2016).

Patriarchal leadership structures: Outmoded institutional structures exist that are hindering the access and advancement of women (Bernstein, 2016). Research shows how employees are less likely to hire a woman than a man with identical qualifications, and are equally less likely to ascribe credit to a woman than to a man

for identical accomplishments (National Academy of Sciences, *n d*). These structures need to be brought down.

Gender stereotypes: Literature has shown that women who conform to gender stereotypes are more likely to be successful as leaders (Cuadrado, Morales & Recio; 2015; Berkery, Tiernan & Morley, 2014; Kark*; et al.*, 2012). Women business managers are thus expected to take up masculine characteristics to "enhance their creditability" as leaders (Oakley, 2000, 326). As such, women often face different expectations than men in the workplace, as well as increased scrutiny for reasons other than ability (e.g., appearance), and are frequently evaluated more severely, particularly women of colour in management and leadership roles (Johns, 2016; Hannum, Muhly, Schockley-Zalabuk & White, 2015; Synder, 2014; Hill, 2016). Self-imposed barriers: Some of the barriers which explain the dearth of women in public leadership are partly self-imposed. These internal barriers may arise from gender differences in behaviour, limited self-promotion and lack of confidence. Such barriers are mainly due to gender stereotypes and gendered social roles (OECD, 2016)

Limited work-life balance and flexible working arrangements: Limited work life balance as well as limited flexible working arrangements remain among some of the biggest challenges in the retention of female leaders, and creative approaches are needed (Deloitte, 2017; OECD, 2016). Should this be left unattended, structural barriers will come into existence. Women take breaks in their career to provide primary caregiving for children or elderly parents, and on re-entering the workforce, the employer's attitude to such breaks in traditional employment is frowned upon, making the upward career trajectory very difficult (Kronos, 2013).

Lack of monitoring and accountability: Every organization has stated intentions of upholding gender equality, but these intentions remains on paper, and are not translated into action. There is a strong need to establish robust accountability mechanisms in order to encourage compliance with gender equality policies, pinpoint deficiencies and redress the remaining inequalities to improve women's access to public leadership (OECD, 2016)

Cultural Barriers: The way in which leadership and managerial roles are classified as a "man's domain" is one important factor impeding women's access to public leadership. In fact, leadership potential is often described as requiring personal qualities such as strength, decisiveness and ambition, which are more readily ascribed to men than women, rather than specific skills (OECD, 2016)

Organizational Culture: Organizational culture plays a crucial role in shaping behaviour in organizations. (Watkins, 2013). The culture that is of significant importance in this instance is that which denotes how companies function; for instance, issues related to strategic change, everyday leadership, interaction between managers and employees and customers, and the way in which knowledge is created, shared, maintained, and utilized (Saurombe, 2016). Within the organization, there is a need to establish support structures for women in leadership, such as providing leadership training opportunities for women so that those with a potential for leadership can hone their skills. The lack of an appropriate culture within the organization could be an obstacle (Sholekar & Shoghi, 2016), ultimately leading to females heading for the exit door of the organization.

In many organizations, developing, retaining, and promoting women in leadership is acknowledged as a business imperative of high significance, but it remains a statement of intent. Organizations need to stand up to the challenge of seeking how best they can retain their female workforce so as to enjoy the competitive advantage.

Strategies to dismantle the female leaders' propensity to exit
It is important for management of organizations to craft and implement well-publicized organizational policies and practices that send consistent messages that they want to hear the concerns of women employees in leadership. From a literary standpoint, several measures have been suggested which can assist in halting the exit of female leadership from organizations.

From a literature point of view, the following points are what could possibly foster the retention of women leaders.

- Top managers should avoid dereliction of organizational response to concerns and inputs put forward by women, and instead, develop attitudes and engage in behaviours that would create a psychologically safety net for their female employees (Redlener, 2008).
- Provide public seminars and workshops to raise awareness in people of the existent conscious as well as unconscious biases against women. Eradicating patriarchal laws and forging strong partnerships across all sectors of society are key to removing barriers blocking progress on gender equality (Economic and Social Council Commission on the Status of Women, Sixty-second Session, 2018; Chisholm-Burns *et al.*, 2017)
- Addressing mind sets that are holding women back, such as shifting the underlying beliefs and behaviours, and challenging these to be supportive of women. (Sanders, Hrdlicka, Hellicar, Cottrell & Knox, 2011). This will require a cultural change over the long term.
- A deep cultural change at both societal and organizational levels is needed if the complex social challenges undermining women's access to leadership are to be addressed.
- At societal level, there is a need to improve the image of women, and this can be done by developing information campaigns and creating awareness-raising programmes about gender stereotypes, inequitable division of household/family care, conscious and unconscious biases as well as highlighting the social and economic benefits that accrue to the society as a result of gender equality (OECD, 2016).
- At the organizational level, the same awareness-raising policies can conscientize the rest of the workforce, shift existent negative organizational cultures and instead encourage the acceptance of more women at the top level echelons. Engaging men can help to further break down stereotypes related to women's leadership roles (OECD, 2016). Added to that is the need to reframe the debate on gender inequality and present the issue as a business opportunity, rather than as a women's issue (OECD, 2016).
- Early Identification of potential female leaders and subsequent investment in them can present a solution. Building confidence in female leaders is a key attribute to leadership success, and the establishment of active relationships and networks between junior-level female employees with female role models could assist in bridging the confidence gap. Deloitte (2017) suggest that organizations can adopt female employee retention strategies such as mentoring them with employees of higher experience levels.
- The fact that women are currently under-represented in leadership roles means that there is a lack of role models that are visible to upcoming leaders (Warner, 2014; Westring, McDonald, Carr & Grisso, 2016), and this will lead to the domino effect of fuelling the lack of a leadership mentality among the upcoming women. They may therefore not believe that they themselves can achieve such senior positions. However, men's perception of role models is quite different; as they move up the ranks, they feel a sense of belonging while females experience a sense of isolation as they tread upon the same path (The Network of Executive Women, 2018)
- Having visible seasoned senior female role models that share their success stories and encourage potentially high performing women in leadership is impactful as well as effective in pointing out leadership pathways as well as possibilities to the upcoming women. (Hannum *et al.*, 2015; Chisholm-Burns *at al.,* 2017). It is easier to aspire to be someone whom you can actually see, and whom you know to be successful in combining career and family responsibilities (Surawicz, 2016).
- Proactively collect success stories and share lived experiences of how role models have addressed the various challenges in the path to leadership and to inspire others (McDonagh, Bobrowski & Keogh Hoss, 2014; Sexton, Harris- Lemak & Wainio, 2014).
- What makes female leaders to stay or go are opportunities for challenging assignments, work life balance, and attractive income (Deloitte, 2017). Organizations need to focus on the concept of empowerment in order to encourage women to want to build careers and desire upward mobility over the long term (Taneja, Pryor & Oyler, 2012)
- Amongst the factors that are known to attract and retain experienced women is the issue of organizational culture (Deloitte, 2017). Creating an enabling environment which takes cognizance of a gender-diverse workforce, and this is inclusive of crafting flexible family friendly working

arrangements even for those at leadership level; the use of gender-sensitive language as well as adoption of anti-harassment and anti-discrimination policies OECD, (2016). Commencing and ending important business schedules at reasonable times and re-organizing schedules so that the same women in leadership can reconcile both family and professional obligations is very important. (OECD, 2016). Organizations often lack supportive policies, such as maternity leave, and flexible scheduling options that accommodate family responsibilities (Bennetts, 2012; Chisholm-Burns *et al.*, 2017) and yet these are part of workplace flexibility that send an important message to the female workforce in leadership (Deloitte, 2017) as these are generally expected to work long hours and be physically present at the work place. Disregarding this may undermine women's representation in top management positions.

3. Research Methodology

A qualitative approach was used to gather data from 10 purposively selected women in middle to senior leadership positions in Higher Education public institutions. The participants had to be black African women in positions of academic leadership. A non-probability sample was purposively selected as the participants had to be black African women in academic leadership positions. The cultural context of the participants formed a key dimension to the research as many academics in South Africa are from other African countries. The women were representative of Malawi, Zimbabwe, South Africa, Lesotho, Zambia and Nigeria, who all work and reside in South Africa. An interpretivist approach and qualitative methodology using content analysis, coding and themes were applied, whereby data are gathered through open-ended, emergent, and probing questions in order to explore the experiences of participants.

Face-to-face interviews of a duration of half an hour to more than an hour with each of the purposively selected participants were conducted. An interview guide was used so as to expose them all to the same set of questions and "so that their views and perceptions could be measured against the same instrument" (Seakamela, 2011). Interviews were conducted with consent from the participants. The inductive approach condenses raw textual data into a brief summary format, and establishes clear links between the research objectives and the summary findings derived from the raw data (Thomas, 2006), and it was therefore used to organize the data from the interviews into different levels of codes (Burnard, Gill, Steward, Treasure & Chadwick, 2008).

As one of the key elements in qualitative data analysis (QDA), coding was used to identify the themes in the text (Miles & Huberman, 1994; Strauss & Corbin, 1990). Verbatim transcriptions of the 10 recorded interviews were used to do the content analysis and identification of themes (Thomas, 2006). The data was then grouped question by question (May, 2007), making it easier to analyze. Each research question is presented and the responses of the participants, whose profile is indicated in Table 1, are quoted verbatim (including an identifier code for the participant to maintain anonymity; P1 being the first participant, P2 the second participant, and so on)

Table 1: Participants' Profile

Identifier Code	Country of Origin	Religion	Designation and type of organization worked for
P1	Malawi	Christian	Snr Management: Higher Education
P2	Zambia	Christian	Snr Management: Higher Education
P3	Nigeria	-	Snr Management: Higher education
P4	Zimbabwe	-	Snr Management: Higher Education
P5	RSA	-	Snr Management: Higher Education
P6	Nigeria	-	Snr Management: Higher Education
P7	Lesotho	Christian	Snr Management: Higher Education
P8	Nigeria	-	Middle Management: Higher education
P9	Zimbabwe	Christian	Senior Administrator
P10	RSA	-	Snr Management: Higher Education

4. Findings and Discussion

Findings and discussions will be presented in relation to the research questions.

What are the reasons why academic women in leadership positions are quitting their positions?
Six core reasons came to the fore as indicated by evidence quotes and will be discussed: Lack of Voice, Social Orientation of the girl child, Race (ethnical orientation), Societal glass ceiling, Lack of role models and Prevalent organizational culture.

Lack of voice
The ice breaker question was: Is it true that women in leadership positions are being forced out of their jobs? All the ten participants responded that it is indeed true. In particular, P2, P5, P7, P9 and P10 responded that women feel as though they are invisible in the workplace.

P9's reason for women wanting to quit is that "women are relegated to mere spectators when it comes to making decisions. Even if they are there in the structures, sometimes they are just there to occupy the seats…their participation is low…is not genuine".

P6 and P8 denied that women in leadership positions are forced to quit, or that their voices are even stifled. Their response stems from the fact that for the woman to reach the leadership position, the assumption is that she has received some high level of education, which has somewhat emancipated her. This was corroborated by Eriguc, Ozer, Turac, & Songur (2014), who mentioned that education has taught women to be confident and be clearly able to express their opinions without fear of anything. This education, however, needs a strong support base. Even if a woman is highly educated, but receives no support from within the organization that she works for, then it all comes to naught.

Social Orientation of the girl child
All ten participants, without hesitation, pointed out that the upbringing of the African girl child in particular (ethnical orientation) influenced the lack of gender balance in senior roles in a work organization. P2 openly exclaimed:

P2: "It is culture that has given birth to this whole thing"
and P9 mentioned that:

P9 "…the way the African girl child is brought up…she is told that you don't just talk…you wait for men to talk".

P4: "It's where we are coming from, our cultural upbringing. …it starts from home. Decisions are made by men.

P7 traced this phenomenon right down to the grassroots level. She mentions that:
"In many instances, as soon as it is announced that a female child has been born, there are frowns and sarcastic remarks, such as 'better luck next time'…'we thought it was going to be a male child'… Society is already biased towards the male child. She grows up with this inferior mentality ingrained in her mind. and so when she enters the world of work, she cannot shirk off this …her confidence has long since been eroded…"

Women on their own volition cannot rebel against these traditional ideologies which turn them into mere spectators in the drama of life (Ebila, 2015; Busia & Abena, 1993; Parenzee and Smythe, (2003). This is indeed a drawback.

Race (ethnical orientation)
P4 mentioned the issue of race (woman of colour) as a causative factor for women in leadership to want to head for the exit door in surrender.

According to P9: "You see, I am black. And that colour is considered as not good enough in a position of leadership. Even among my fellow black people, they disrespect me because of that. Any other colour is better…but black? No, that is not easily acceptable".

Societal glass ceiling
The Social role theory states that women's ability to hold roles such as management positions is greatly questionable (Eagly, 2013), rather, it is men who are viewed as naturally suitable for undertaking leadership roles.

Hence the serious apathy in moving up the career ladder - there is a 'societal' glass ceiling above her head (P4, P5, P9, and P10) beyond which she can go no further. P9 mentions that:
"According to society, a woman is naturally weak… she cannot take a leading role over men…"

Due to this phenomenon, women often do not progress beyond middle management.

Lack of role models

P7: "…the absence of women in top structures does not set a good example to aspiring young women…we do not have role models to look up to…we do not see any women actually breaking the set boundaries…this is a limiting factor."

Prevalent organizational culture

Organizational culture has a part to play in making women feel the hostility at the workplace.

P4: "organizational culture is very reluctant to promote…especially when you are young. If you look at the terms and conditions of service of organizations…are they conscious of our other responsibilities? They do not cater for you as a woman…."

P4 chronicles how a young employed woman cannot participate in team development activities or strategic meetings that take place outside of the normal work environment, upon which rests her promotional advancement, because of her other duties of raising young children. She is compelled to be in her home environment so as to accomplish her cultural duties of raising her child, but work demands that she goes away for, say, a 4-day seminar, and she must leave her young child in the care of a baby sitter as the organization will not pay for her child's and baby sitter's accommodation. Moreover, there will not be time allocated to her for breastfeeding during the seminar. In this way, the prevalent organizational culture which shows a serious lack of gender differentiation (Fapohunda, 2016) demotivates the young woman in as far as career advancement is concerned. Such gender differences at work need to be recognized and given due attention by management.

How can the loss of African female leaders in academia within South Africa be reined in?

At the conclusion of each of the 10 interviews, participants were asked for possible solutions to stop African women in academic leadership from quitting. Most of the responses given were in alignment with available literature, however some specific inputs regarding South African HEI.

Developing self confidence in African women

Build confidence from the girl child level onwards

P2: "Teach our girl children early not to allow themselves or anyone to look down on them. Teach them to stand on their own; to stand their ground, to give them a voice."

P4, P8 and P9 mentioned how women should take advantage of their natural role of raising children and change the status quo. They are the ones who bring up children, both male and female, so they are in a position to teach children gender sensitivity so as to remove the societal divides in the long run.

This is corroborated by KPMG Women's Leadership Study (2015), who mentioned that childhood lessons and values received leave an indelible mark.

Some of the reasons for the dearth of female leadership are self-imposed, such as limited self-promotion and lack of confidence. OECD (2016) mentions that such barriers are mainly due to gender stereotypes and gendered social roles. Below are some of the responses:

P4, P7, P9 and P10 all alluded to the fact that women should learn to speak out as no-one else will come to the rescue of the woman except the woman herself…

P7: "As a woman leader, you need to put your foot down. Learn all about leadership. Leadership skills play a very big role; how you hold yourself in public, is very important if people are to take you seriously and this should be reinforced and embraced in learning institutions".

P2 brought in a fresh perspective:

"Have faith in yourself as an individual. Tell yourself that the sky is the limit. At the end of it all, how you handle yourself determines how the men treat you."

Removal of patriarchal leadership structures

Institutional structures such as patriarchal leadership are hindering the access and advancement of women (Bernstein, 2016). Responses were given that called for the total eradication of such laws; to which the Commission on the Status of Women, 62nd session, (2018) lent their support and suggested the creation of strong partnerships across all sectors of society which are aimed at removing barriers that block progress on gender equality.

P7 and P9 wanted to have patriarchy done away with, to find a way to deconstruct it…to tear it down

Removal of cultural barriers

The association of leadership and managerial roles as a "man's domain" is one of the leading factors impeding women's access to public leadership. Leadership potential is often described as requiring personal qualities

such as strength, decisiveness and ambition, which are more readily ascribed to men than women, rather than specific skills (OECD, 2016) Harmful corollaries such as these and the social role theory, require the shifting of underlying beliefs and behaviours of society (Sanders *et al.*, 2011). Responses cited below speak to this point:

P7 and P10: culturally, a woman is not acceptable in a position of leadership;

P2, P4 and P8 spoke against the clear cut cultural roles ascribed to males and females by society;

 P5, P10: Culturally, there exists an ingrained belief that leadership is a preserve for men

Positive Organizational Culture

The prevalent organizational culture has a part to play in the retention or loss of female leadership. A negative culture will push the female leaders away, while a positive one will attract them.

P4: "A woman leader at work is shunned. Having a leadership position over males is difficult as they refuse to take orders from you, along with so many other odds pitted against you...unless the organizational leadership comes to your rescue, you will fall..."

Women also mentioned the fact that while policies supportive of women may exist within the organizational documents, they need to be translated into action

P7: "...a policy cannot run itself...what is there to monitor compliance? Organizations must put in place mechanisms to monitor compliance of these policies..."

P5: "Organizations need to ensure equity; to translate what is in black and white into practice"

An ideal organizational culture is one that is seen as being supportive of the diversity created by different ideas and opinions (from both males and females) and ensures that employees express their ideas, opinions, concerns and suggestions about work (Yurdakul, Besen & Erdogan, 2016). Creating a conducive organizational cultural infrastructure (Sholekar & Shoghi, 2016), with policies that are actually implemented, will assist in preventing the exit of female leadership

Not just nominal support of women in positions of academic leadership

Women need more than just nominal support; they want genuine support.

P4: "Look at all the conventions of women emancipation and whatever else that has been done. Nothing has come forth. The woman is still where she was. Even if the government talks about women empowerment, what they do is give a woman a job in government. What type of empowerment is that? Financial? At the end of the day, has she really been empowered enough? If she is appointed as head of an organization, will she be able to stand and manage the workforce that is there? What government does is simply to let her occupy that seat, and for them to tick their boxes that they have supported the cause of women. But in reality, is she capable? Nooo. It's not the financial assistance that we need, but instead, we need the intellectual, emotional...and all the support available. We need counselling...we want that 'push', because where we're coming from (ethnic origin); we've been told we're insignificant; were not good enough, we're second class citizens, we're second class everywhere we go."

Women want opportunities for challenging assignments, (Deloitte, 2017); they need to be empowered in order to encourage them to want to build careers and desire upward mobility over the long term (Taneja *et al.*, 2012)

Embrace everyone in bringing about change

Holding workshops and using information dissemination platforms within the society may change the societal outlook about a woman in power. This is to curb a problem that may arise whereby the woman, after attending such empowering workshops at work, goes back home to interact with her people who didn't attend the same workshop. Everything will come to naught.

P4: "It's a case of let's bring everybody to the table. Conscientise the men that women have potential...'

This was corroborated by OECD, (2016) that engaging men in the solution can help to further break down stereotypes related to women's leadership roles.

Role models

P9: "...set real life examples before them so that they envy them, look up to them".

Literature states that role models are impactful as well as effective in pointing out leadership pathways, including possibilities to the upcoming women (Chisholm-Burns *et al.,* 2017; Surawicz, 2016; Hannum *et al.*, 2015).

Women to support each other
Participants also frequently referred to the "woman pull down syndrome" that exists among the women themselves as a reason to want to exit, there is a general lack of support for fellow females from where it matters most-the women themselves (P4, P5, P7, P8, P9 and P10).
P9: "the disadvantage a woman has is that it comes from both sides. The women (her own) do not respect her, they're jealous...the men are even worse. In this way, we're the biggest culprits behind our own downfall".
Balanced work life
While balanced work life is also applicable to men, a woman tends to be overburdened by the load society places on her head.
P8: "...the maternal duties that a woman must do before coming to work on a daily basis, are too heavy ...such that as she comes to work, she is already exhausted. In meetings, you may think she's there, but her mind will not be in that meeting, but where her other responsibilities lie".
In support of P8, Bennetts, (2012); Chisholm-Burns *et al.* (2017) and Deloitte, (2017) mention that organizations often lack supportive policies that promote workplace flexibility such as maternity leave, and flexible scheduling options that accommodate family responsibilities. Female needs in the workplace differ from those of males. The fact that women are in leadership positions means they are expected to work long hours and be physically present at the work place and the absence of supportive policies may undermine women's representation in the top management positions.

Contribution of the Study
Organizations need to promote a healthier and more motivated workforce whose effectiveness of decision making is improved by a diversity of perspectives, such as gender diversity. In today's increasingly talent-constrained environment (Sanders *et al.,* 2011), women in leadership positions represent an under-utilized talent pool which organizations can profitably benefit from, and their absence in leadership structures deprives organizations of an important source of talented and accomplished personnel who could contribute to organizational competitiveness. As a result of this study, organizations are encouraged to put in place efforts to transform institutional structures and procedures which are aimed at eliminating all types of gender bias. This requires not only strong, dedicated leadership; but continuous attention, evaluation, and accountability at all times.

Limitations
The findings of this study are based on the experiences of a small group of African women in leadership positions in a singular institution of higher learning in South Africa. The results may be unrepresentative, but they at least provide a basis for further evaluation of the issues raised. International data on women representation in more institutions of higher learning would broaden the study and give it a wider geographic coverage to highlight the gravity of the issue of a dearth of women in leadership positions.

Managerial Implications
For women already in managerial positions, the issue of gender bias remains a worrisome challenge. Management should harden their resolve to continue in their quest for female advancement, recognition and equal opportunity. This research portrays the gravity of the dearth of female leadership in HEI due to a 'leaking pipeline' mainly as a result of organizational factors, e.g. organizational politics and cultural assumptions that is not dealt with. The development and implementation of organizational interventions that target the root causes of gender bias and seek to correct the manifestations of such phenomena should be sought.

5. Conclusion

In the literary world, the topic of the leadership gap is increasing and has captured the attention of many. The 21st century is indeed a time whereby there's an erroneous assumption that gender equality is supported in organizations. It is both deeply troubling and embarrassing to note that women are capable of significantly contributing to organizations that they work for but are impeded from doing so by gender and racial or ethnic bias; along with outmoded "societal and cultural norms." This is indeed a call to action. This paper has presented a different spin to the available literature on why female employees, specifically those in HEI

leadership positions, want to quit their jobs - by bringing in the contextual aspect of race/ethnicity alongside regionality. What happens in one region is different from another, and a different perspective tends to bring in new thoughts for further research on women in leadership. The world over, there are many practices that are being developed to increasing both the participation of women in organizations as well as their appointment to leadership positions. The challenge to ensure inclusion and embrace African women leadership in HEI remain. In order to succeed serious effort is necessary on societal and organizational levels where practices and strategies regarding women talent in HEI is actively driven in order not to losing them due to a 'leaking pipeline'.

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Paper 12

Factors leading to non-compliance of control activities within public service: Case of the Eastern Cape Department of Rural Development

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Abstract: This paper sought to establish solutions to non-compliance issues and determine effects on performance within the Eastern Cape Department of Rural Development and Agrarian Reform (ECDRDAR). The study further sought to establish the effectiveness of internal control units in providing assurance, and enhancing operational compliance in departmental operations. The existence of non-compliance issues within most government departments lead to exposures and hinders service delivery. One of the reasons for non-compliance issues within the ECDRDAR, is the lack of management support for the role of internal control units. It negatively affects the overall compliance to policy, regulations and statutes, which exposes the department to high risk that affects service delivery. The study employed a quantitative cross-sectional research survey method to solicit data from respondents using a sample of 150 by way of interviewer-administered questionnaires. A purposive non-probability sampling was used to select the respondents. Data was collected from internal control unit officers and finance staff responsible for compliance within ECDRDAR. This study utilised descriptive frequencies, cross-tabulations and correlation analysis to analyse the data from the surveys. The relational and predictive factors leading to non-compliance issues were found to be poor communication of compliance procedures among finance staff, inadequate training, lack of independence on internal control units, and lack of management support. Research exists concerning the factors that lead to non-compliance within public service, but there is dearth of such research in South African government departments. Previous scholars have documented studies on the effectiveness of internal control units in administrative government department; however there is an absence of research conducted on factors that lead to non-compliance issues particularly in South African government departments. Compliance in government departments is considered a key for a better service delivery.

Keywords: *Internal control units, compliance support structures, South Africa, Rural and agrarian reform, public service*

1. Introduction

Government departments such as the Eastern Cape Department of Rural Development and Agrarian Reform (ECDRDAR) have an obligation to have effectual internal controls system (South Africa, 1999), to ensure optimum proper use of public funds when rendering public services (Sebola & Mamabolo, 2016). It is unfortunate however that the departments still misuse government funds in the form of unauthorised, irregular, fruitless and wasteful expenditures (Dlomo, 2017). There is prevalent non-compliance to the procurement related legislation, policies and processes when rendering public services (Smart Procurement, 2011). The non-compliance is also deemed to be due to lack of control activities, lack of support for internal control units, lack of communication of compliance procedures to employees, inadequate employee training and lack of independence on the role of ICU. These factors negatively impede overall compliance to policy, regulations and statutes, exposing the department to high risks that deter service delivery (Nombembe, 2011). Public service delivery is necessary as a tool for for addressing the existing socio-economic imbalances (Sebola & Mamabolo, 2016). It is against this background that this study aims to investigate the factors leading to the non-compliance of controls activities within the Eastern Cape Department of Rural Development and Agrarian Reform.

2. Compliance issues within the ECDRDAR

It can be argued that there exist compliance issues within South Africa government departments resulting in prevalent mismanagement of public funds. This phenomenon is also notable at the ECDRDAR, which has various internal control failures in their delivery on public services (Nombembe, 2011). It is public knowledge that the Eastern Cape region is frequently affected by sporadic service delivery protest. As such, the service delivery protests in the Eastern Cape Province have been increasing in recent years, as result of mismanagement of funds caused by non-compliance with control activities. A better understanding of the management role towards compliance of control activities is important for both safeguarding of public funds and the service delivery.

Management role within the government departments

In terms of the PFMA, management of the government department is known as an accounting officer, it is accountable for the way the department is run as well as how the department spend its funds towards service delivery. It is within the management responsibility to implement the PFMA provision and achieve the desired results by being responsible for delivering such results, which are outlined in the departmental budgets (National Treasury, 200). It also prepares the departmental budget that reflects measurable departmental objectives (National Treasury, 200). As part of provides reasonable assurance that such objectives are achieved, the management have a responsibility to design, develop and implement internal control systems as required by the section 38 of the PFMA 1 of 1999 (Makgatho, 2013). Compliance with all PFMA provisions and internal control provide reasonable assurance that departmental funds are not misused (Makgatho, 2013). However, the management fails to comply with the provisions of the PFMA and misuse departmental funds (Uwaoma and Ordu, 2015). Management is sometimes referred to as "setting the tone at the top", meaning if the management does not comply with the provisions of the PFMA, the rest of the employees will also not comply (Dinapoli, 2010). This undermines the role of internal control unit, which monitors departmental spending by ensuring compliance with the provisions of PFMA is upheld.

Internal control units in government departments

Internal control unit (ICU), is a unit establish to assist the finance function with compliance of the PFMA provisions, procurement related legislation, policies and processes when the department render public services, as such the unit is incorporated within the departmental finance structure (Treasury regulation, 2001). It is a statutory provision that ICU must monitor and ensure compliance with the PFMA provisions, procurement related legislation, policies and processes when the department render public services (Department of National Treasury, 2012). This unit pre-audits procurement processes when the department acquire goods and services to ensure all procurement related legislation, policies and procedures are upheld. It also pre-audits all the payments processes to confirm their compliance with the PFMA payment guidelines before the payments are authorised. Lastly, the unit identifies financial risks, weaknesses such as non-compliance with the PFMA provisions and recommend areas for improvement to the management. Thus establishment of internal control unit is necessary as essential internal control mechanism as a tool for monitoring, and ensuring control activities are upheld (Tys, 2015). It provides reasonable assurance that all rules and regulations are adhere to regarding internal control activities (Coetzee, et al., 2014). Further enhancing operational compliance within departmental operations. The ICU, it is however, prevented from achieving is objective by the management ability to override control activities for their personal benefit. Despite the role of ICU to prevent non-compliance, management is not implementing the recommendation by the ICU to prevent financial risk the department might be exposed to.

Management support towards the ICU role

The management support towards the role of ICU is expressed by management commitment to comply with the PFMA provision and implementing recommendation that prevent financial misuse (Dessalegn and Aderajew, 2007). This means ICU employees are more inspired and encouraged to execute their engagements knowing that management supports their value-adding to the department. This, however, is not the case with management, its lack of action against identified non-compliance risk continue to expose the department on the risk of financial misuse and the non-compliance thriving. Another factor leading to non-compliance is a poor communication of compliance procedures to all employees.

Communication and dissemination of information

One of the committee of sponsoring organisations' (COSO) framework component, information and communication described the importance of relevant, reliable, and easily accessible information to reach those who need it for them to timely execute their responsibilities (Channar et al, 2015). The information concerning the role of the compliance support structure and compliance procedures is not readily made available to those who need it. Consequently, it results in several finance employees not understanding the role of the ICU with the department. This adversely affects the department, as employees are unable to do their work accordingly because of poor communication of compliance procedures, which leads to the violation of PFMA provisions.

Inadequate employee training

According to Sommerville (2007), training is described as a process where employees are equipped with the necessary information needed for them to operate within their respective working environments. This process changes how the employees behave within the organisation (McCleland, 2002). The inadequate training of employees, however, affects their job satisfaction and work performance, which, in turn, threatens the service to be rendered (Lashley & Best, 2002).

Independence of ICU

Independence is measured by the freedom available to perform the work free from all the conditions, which threatens the work to be performed unbiasedly (Coetzee et al., 2014). However, the ICU seems to be prevented from performing its regular formal responsibilities. The organogram requires that ICU employees report to the Chief Financial Officer (CFO). At the back of the reporting structure, it is the assumption that management often meddle with ICU operations. This undermines compliance processes within the department, enable non-compliance activities to thrive and expose the department to the risk of misuse of government funds. This negatively affects service delivery.

Theoretical Framework

The study followed the principal-agency theory; the theory explains the relationship that should exist between two or more parties, where there is a principal that defines the work to be performed by an agent (Uwaoma & Ordu, 2015). The theory is applicable to this study because internal control units are actually only working as agents of the principal who is the key employer (the government). The unit is employed by the government (principal) to ensure that internal financial controls, rule and regulations are followed at least so that there is no unauthorised, irregular, fruitless and wasteful expenditures. The extent to which the internal control units can exact compliance with internal financial controls is only limited to level of their freedom and or the freedoms that they are getting.

3. Research Methodology

The target population for the study was the head office and seven districts offices of the ECDRDAR. A Purposive sampling method was used in selecting the prospective respondents. Purposive sampling is a non-probability sampling procedure that is selected based on characteristics of a population and the objective of the study (Surbhi, 2016). A total 150 ECDRDAR finance employees constituted the population of the study and they were also made a sample. Hundred and fifty interviewer-administered questionnaires were circulated to the identified sample. A total number of 110 fully completed questionnaires, representing 73.33 percent response rate were returned and received for analysis. Sampling adequacy tests were done by way of Kaiser-Meyer-Oklin in the order of Yong and Pearce (2013).

The interviewer-administered questionnaires method was used because of its nature of cost saving and easy to answer. Since with this method the respondents can complete the questionnaire at their own pace and time, it ensures a high possibility of more convenience for the respondents and the anonymity (Bryman & Bell, 2007). The respondents were also assured their anonymity and encouraged not to put their identities in the questionnaire, since only a numerical key can identify each response in the questionnaires. The questionnaire layout contained seven sections: Section A consists of respondent's biographical information, which is based on dichotomous and multiple-choice questions. Section B contained questions on the

respondent's employment history. Section C contained questions on the objectives for internal control unit role.

Section D contained questions on financial management activities performed by internal control unit. Section E contained questions on internal control unit role preventing financial mismanagement. Section F contained questions on internal control unit assurance activities. Section G contained questions on operational challenges experience by internal control unit. The questionnaires used a five-point Likert scale ranging from (1) strongly disagree, while (3) represent I do not know to (5) strongly agree for sections C, D and G. whereas Sections E and F applied a five-point Likert scale ranging from (1) never to (5) always.

4. Data Analyses

The composition and profile of the sample was studied using the following descriptive statistics: cross-tabulations, frequencies and means. Statistical Package for Social Sciences (Version 25.0) for Windows was used to run statistical analysis of the data (Joreskog & Sorbom, 1996). Reliability tests to examine the reliability and validity of the measuring instrument of the data collected. Descriptive statistics by way of frequencies and correlation analysis were extracted; and factor analyses were conducted.

The Socio-Demographic Profile of the Respondents
This section provides a summarized socio-demographic profile of the respondents. The sampled respondents were asked to provide their biographical information, which including gender, age, and educational status. There were 110 respondents in the survey with 71 females (64.5%) and 35 males (35.5%). the majority of the participants 44 (40%) are between the age of 30-39, whereas the least respondents 2 (1.8%) are between the age 60 and above. The respondents between the majority and the least were 29 (26.4%) between the age of 50-59, 20 (18.2%) under the age 30 years and the last ones were 15 (13.6%) between the age of 40- 49.

The study identified that 56 (50.9%) respondents holds the post graduate qualification, 43 (39.1%) of the respondents possess undergraduate diplomas or equivalent degrees and lastly 11 (10%) of the respondents have high school certificate.

Descriptive Sample Means
Three data central measures, median, mean and the standard deviation were used to represent the results of this study. According to Gravetter and Wallnau (2013) mean values are normally used to rank or prioritise items amongst other things, whereas the median values are used to provide an insight into the absolute middle value (average). The early mentioned central measures were used as the basis for a five-point Likert scale to determine the point of "I don't know" or "moderate" where the mean value is 3. In the same manner, a mean value greater than 3 (thus 4 and above) represents the agreement whereas a mean value less than 3 represents the disagreement. The mean score ratings of the Five variables is presented in Table 1.

Table 1: Overall means of the variables

Variables	N	Median	Mean	Std. Dev.
Objectives for internal control unit role: Overall				
C1 Improves corporate governance	110	4	4.21	.802
C2 Improves the functioning of Internal controls	110	4	4.29	.860
C3 Mitigate the financial risks	110	4	4.34	.707
C4 Promote compliance with controls	110	5	4.37	.788
C5 Provide assurance services about compliance with internal controls	110	4	4.35	.795
Financial management activities: Overall				

	N		Mean	Std. Dev
D1. ICU ensures compliance of commitment (orders)	110	5	4.62	.649
D2 ICU ensures that all payments to be made are valid	110	5	4.63	.715
D3 ICU ensures the validity of subsistence and travel allowance	110	5	4.55	.819
claims	110	5	4.47	.821
D4 ICU ensures correctness of personnel-related claims	110	4	3.94	1.086
D5 ICU ensures correctness of bonuses paid to employees	110	4	4.04	1.100
D6 ICU ensures the department spend within its budget	110	4	3.45	1.352
D7 ICU ensures that revenue management requirements are adhered				
Internal control unit role: Overall				
E1 prevents unauthorized expenditures	110	4	4.08	1.166
E2 prevents irregular expenditures	110	4	4.14	1.018
E3 prevents wasteful and fruitless expenditures	110	4	4.07	1.131
Internal control unit assurance activities: Overall				
F1 Departmental funds are safeguarded	110	4	4.12	1.073
F2 Financial fraud is prevented	110	5	4.40	0.890
F3 Operations efficiency is improves	110	5	4.43	0.784
F4 Financial reliability and integrity is increase	110	5	4.37	0.776
F5 Monitoring procedures are establishes	110	4.5	4.29	0.860
F6 Correct accounting data is provides	110	4.5	4.30	0.863
F7 Solid financial management of operations is attained	110	5	4.31	0.886
F8 Accurate information is provided to support strategic	110	4	4.13	1.050
managerial decisions	110	5	4.38	0.846
F9 Effective role on departmental activates is provided	110	5	4.35	0.840
F10 Better service delivery is attained				
Operational challenges experience by internal control unit (ICU): Overall				
G1 ICU has incompetent staff	110	2	2.65	1.235
G2 ICU is not supported by the Management	110	3.5	3.18	1.293
G3 ICU role is not clearly communicated to all departmental	110	4	3.44	1.282
employees	110	4	3.40	0.979
G4 ICU staff lacks adequate training	110	4	3.57	1.161
G5 ICU independence and objectivity is impaired				
Valid N (list wise)	110			

In terms of the importance of internal control unit objective, all the means documented were above 4 and the highest mean documented was on C4 (mean=4.37), followed by C5 (mean=4.35) and the lowest documented mean was on C1 (mean=4.21). The documented item with the highest standard deviation was C2 (std. dev. =.860) and C3 documented the lowest standard deviation of .707. This demonstrates the strong level of agreement concerning the objectives of internal control unit role. With regards to the significance of various items on financial activities performed by internal control unit, the highest documented mean was 4.63 on item D2, followed by item D1 with the mean of 4.62 and the item D1 also have the lowest (std. dev. =.649). The documented mean score on item D4 was 4.55, on item D4 was 4.37, on item D6 was 4.04 and on item D5 was 3.94. The item documented the highest standard deviation was D7 (std. dev. = 1.352), suggesting the highest extant of disassociation of participants on this item. The item also scores the lowest mean of 3.45 which indicates that the item is the least important item on financial activities performed by internal control unit. These results indicate the strong level of agreement concerning activates performed by internal control unit.

On the role of internal control unit, all the items demonstrated mean scores above 4 with the highest mean document of 4.14 on item E2, whereas the lowest mean documented   was 4.07 on item E3. The documented middle mean was 4.08 on item E1, this suggest the strong level of agreement on the respondents with regards to the effectiveness of internal control unit. With regards to internal control unit assurance activities, all items have indicated means scores above 4 with the highest mean 4.43 on item F3. The following items were on F2

(mean= 4.40), F9 (mean=4.38), F4 (mean=4.37), F10 (mean= 4.35), F7 (mean = 4.31), F6 (mean= 4.30), F5 (mean= 4.29) and on F8 (mean= 4.13). The item demonstrated the lowest mean was item on F1 (mean= 4.12) with the highest standard deviation of 1.073. The outcomes of these findings suggest a strong level of agreement between the respondents with regards to internal control unit assurance activities. In terms of the operational challenges experienced by internal control unit, the highest mean recoded was on item G5 (mean= 3.57), followed by item G3 (mean=3.44) and item G4 (mean=3.40). The lowest mean value recoded was 2.65 on item G1. The highest documented standard deviation was on item G2 (std. dev. = 1.293). This suggests a little agreement on respondents concerning the operational challenges experienced by internal control unit.

Reliability and validity of the results
The reliability of the survey result was tested using the Cronbach's Alpha. According to Morgan & Waring (2004) reliability of data involves adequate, comprehensive and correct data collection, which aimed at measuring the relevant concept under investigation. As such, Cronbach's Alpha test was used to determining the extent to which various variables in a questionnaire measures the same concept. The survey instrument for this study has attained 0.90 internal consistency reliability, thus 90% of reliability. The results for the reliability test are shown in table 2.

Table 2: **Cronbach's Alpha values for the reliability test**

Constructs	Cronbach's Alpha	Cronbach's alpha based on standardized items
OICU	.862	.863
APICU	.796	.816
ICUEPFM	.929	.932
ICUAC	.935	.939
CEICU	.633	.629

NOTE: ICUOF= ICU Objectives; APICU= Activities performed by ICU; ICUEPFM= ICU effectiveness to prevent financial mismanagement; ICUASA= ICU assurance service activities; CEICU= Challenges experienced by ICU.

According to Kerlinger and Lee (2000) the reliability test results at 0.60 and above indicate the level of reliability thereby accepted as reliable. Accordingly, the lowest Cronbach's Alpha test value documented was on construct CEICU as .633. Based on this level of alpha values, a conclusion was made that the data deem reliable.

Correlation Analysis
The correlation analysis was conducted to test the validity of the survey result. The statistical tool Pearson correlation "*r*" was employed to study and ascertain the leaner relationship in the data, as well as testing the statistical significance of the relationship between each of the variable. The first construct tested was the objective of internal control unit role see table 3.

Table 3: Inter-item correlation table for the objective of internal control unit role

Correlations

	Means	SDV	ICUICG	ICUIFIC	ICUMFR	ICUPCC	ICPCAC
ICUICG	4.21	.802	1				
ICUIFIC	4.29	.86	.708**	1			
ICUMFR	4.34	.707	.586**	.441**	1		
ICUPCC	4.37	.788	.615**	.420**	.563**	1	
ICPCAC	4.35	.795	.533**	.549**	.526**	.627**	1

**. Correlation is significant at the 0.01 level (2-tailed)
NOTE: ICUICG = ICU require management support to improve governance; ICUIFIC = ICU require management support to improve the functioning of controls; ICUMFR = ICU require management support

mitigate financial risk; ICUPCC = ICU require management support to improve compliance with financial controls; ICPCAC= ICU require management support to provide assurance of compliance with controls

The inter-item correlations analysis for each construct above was conducted to establishing the relationship amongst the constructs. The result indicate a positive moderate to a strong correlation to each other at 95% significant level (p= 0.01).

The correlation analysis for Inter-item correlation for activities performed by the internal control unit is presented in table 4.

Table 4: Inter-item correlation for activities performed by the internal control unit

					Correlations					
	Means	SDV	COC	CVPB		CSTA	PVPRC	HRP	BPP	RMR
COC	4.62	.649	1							
CVPB	4.63	.715	.758**	1						
CSTA	4.55	.819	.557**	.748**	1					
PVPRC	4.47	.821	.342**	.475**	.548**	1				
HRP	3.94	1.086	.251**	.217*	.298**	.384**	1			
BPP	4.02	1.1	.305**	.207*	.192*	.315**	.730**	1		
RMR	3.45	1.352	.105	.129	.168	.276**	532**	.611**	1	

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
NOTE: COC = ICU require management support to ensure compliance of commitment; CVPB = ICU require management support to ensure all payments made are valid; CSTA = ICU require management support to ensure the valid payments of subsistence and travel allowance; PVPRC = ICU require management support to ensure the validity and correctness of personnel-related claims; HRP = ICU require management support to ensure the correctness of bonuses paid over to employees; BPP= ICU require management support to ensure the department spend within its budget; RMR= ICU require management support to ensure revenue management requirements are adhered to.

The correlation analysis presented above indicates statistical relationship across activities performed by the internal control unit that ranges between COC- RMR. The correlation results demonstrated a small to a strong correlations at significant level (p= 0.01) and (p= 0.05).

Correlation for Inter-item correlation analysis for internal control unit effectiveness is conducted in the table 5.

Table 5: **Inter-item correlation analysis analysis for internal control unit effectiveness**

Correlations					
	Means	SDV	ICUEPU	ICUEPI	ICUEPWF
ICUEPU	4.08	1.166	1		
ICUEPI	4.14	1.018	.794**	1	
ICUEPWF	4.07	1.131	.788**	.876**	1

**. Correlation is significant at the 0.01 level (2-tailed).
NOTE: ICUEPU = ICU is effective in preventing unauthorized expenditures; ICUEPI = ICU is effective in preventing irregular expenditures; ICUEPWF = ICU is effective in preventing wasteful and fruitless expenditures.

All variables on the table above have demonstrated a strong correlation results at a significant level (p= 0.01). Other correlation analysis that was conducted was on internal control unit assurance activities, the results of such analysis are shown in table 6.

Table 6: Inter-item correlation analysis - internal control unit assurance activities

Correlations

	Means	SDV	AGFP	AFFP	AOEI	AFRII	AMPE	ACAA	ASFMO	AERDA	AFI
AGFP	4.12	1.073	1								
AFFP	4.4	.89	.555**	1							
AOEI	4.43	.784	.540**	.739**	1						
AFRII	4.37	.776	.398**	.632**	.656**	1					
AMPE	4.29	.86	.370**	.458**	.603**	.605**	1				
ACAA	4.3	.863	.447**	.690**	.637**	.544**	.648**	1			
ASFMO	4.31	.886	.531**	.633**	.667**	.471**	.603**	.754**	1		
AERDA	4.13	1.05	.410**	.563**	.613**	.436**	.608**	.677**	.815**	1	
AFI	4.38	.846	.445**	.697**	.735**	.633**	.527**	.734**	.711**	.709**	1
ABSD	4.35	.84	.423**	.623**	.652**	.589**	.672**	.679**	.731**	.667**	.717**

**. Correlation is significant at the 0.01 level (2-tailed).
NOTE: AGFP = ICU provides reasonable assurance that departmental funds are safeguarded; AFFP = ICU provides reasonable assurance that financial fraud is prevented; AOEI = ICU provides reasonable assurance that operations efficiency is improved; AFRII = ICU provides reasonable assurance that financial reliability and integrity is increased; AMPE= ICU provides reasonable assurance that monitoring procedures are established; ACAA= ICU provides reasonable assurance that correct accounting data is availed; ASFMO = ICU provides reasonable that solid financial management of operations is attained; AERDA= ICU provides reasonable assurance that accurate financial information is provided to support strategic managerial decisions; AFI= ICU provides reasonable assurance that effective role in departmental activities is established; ABSD= ICU provides reasonable assurance that better service delivery is attained.

The correlation analysis of internal control unit assurance activities have demonstrated a moderate to a strong correlation at the significant level (*p*= 0.01).

The last correlation analysis was conducting on the operational challenges experienced by internal control unit (ICU); the results are presented in table 7.

Table 7: Inter-item correlation table for the operational challenges experienced by ICU

			Correlations				
	Means	SDV	ICUIS	ICUS	ICUCF	ICUAT	ICUIO
ICUIS	2.65	1.253	1				
ICUSM	3.18	1.293	.148	1			
ICUCF	3.44	1.282	.211*	.715**	1		
ICUAT	3.40	.979	.064	.239*	.276**	1	
ICUIO	3.57	1.161	.248**	.119	.219*	.289**	1

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
NOTE: ICUIS = ICU has incompetent staff; ICUSM = ICU is not supported by the Management; ICUCF = ICU role is not clearly communicated among the finance staff; ICUAT = ICU staff lacks adequate training; ICUIO= ICU staff independence and objectivity is impaired

Inter-item correlation analysis for the operational challenges experienced by internal control unit have demonstrated a small to strong correlation at two significant levels, thus (*p*= 0.05) and (*p*= 0.01). On overall the Inter-item correlation analysis have shown a positive relationship, therefore the survey results were considered to be valid.

Factor Analysis

Yong and Pearce (2013) state that factor analysis functions based on the perception that measurable and observable variables can be minimized to a smaller amount of factors, which shares a mutual but unobservable variance. Based on this shed light, a summary can be made that factor analysis permits reduction of large records, which consists of a number of items by assembling them into a descriptive category. This study has followed a principal analysis (PCA) with orthogonal Varimax with Kaiser Normalisation rotation method when conducting factor analysis in line with Dubihlela and Chauke (2016). The PAC was used to extract the key factors that met the minimum criteria (≥1) (see Table 8: Total variance explained). Varimax with Kaiser Normalisation (Rotation method) was used to extract the factors that met the cut-off criterion of .40 (extraction method).

Table 8: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.384	31.280	31.280	9.384	31.280	31.280	6.895	22.982	22.982
2	4.017	13.391	44.671	4.017	13.391	44.671	3.563	11.878	34.860
3	2.203	7.345	52.016	2.203	7.345	52.016	3.002	10.007	44.867
4	2.032	6.774	58.790	2.032	6.774	58.790	2.838	9.459	54.326
5	1.642	5.474	64.264	1.642	5.474	64.264	2.030	6.766	61.092
6	1.334	4.446	68.710	1.334	4.446	68.710	1.931	6.438	67.530
7	1.091	3.637	72.347	1.091	3.637	72.347	1.445	4.817	72.347

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 10 iterations

As a result of the above, there were 7 factors with eigenvalues ≥1 (Table 8). The "% of variance" column has shown how much of a total variability is accounted for by each of the summary components. For instance, component 1 accounts for 23% of the variability in all the 7 variables, and all the components cumulatively explained 72% of the variance in the data, which was credibly significant.

Factor loadings and extraction

Yong and Pearce (2013) states that factor loading is another factor analysis tool that helps to test how strong the relationship of factors is. Accordingly, Table demonstrates the number of significant factors that were established, extracted and only those rotated values that were meaningful for interpretation. While the extractions in this study are based on commonalities, all eigenvalues values that were less than 1 were eliminated. The extraction of rotation for the sums of squared loadings that demonstrated eigenvalues and variance was done after rotation. The PCA was used in providing interpretation, whereas the matrix of loadings was rotated to obtain Varimax rotation that was used to suppressing small coefficients where eigenvalues values below 1 were eliminated. After all the above techniques were done, only 7 items were subjected for further analysis as displayed in Table 8. The primary goal for conducting such analysis was to identify item loadings >0.40 that are meaningful for interpretations. Furthermore, the components with items two and less have been eliminated since such components indicate a lack of correlation pattern.

After the elimination of the mentioned components, the analysis has produced a seven-component factor solution with a simple structure (factor loadings >.40) see Table 9. The following section details the content of questions/statements that had loaded into one factor; this was an attempt to find all the factor/s that loaded most strongly to each variable as common themes, which consequently assist in establishing what the construct might be.

Table 9: Rotated Component Matrix[a]

Factor	Component						
	1	2	3	4	5	6	7
Assurance of financial reliability and integrity	.863						
Assurance of operations efficiency	.852						
Assurance of effective role in departmental activities	.829						
Assurance of correct accounting data	.827						
Assurance that financial fraud is prevented	.800						
Assurance of accurate financial information provided that support strategic managerial decisions	.799						
Assurance that better service delivery is attained	.769						
Assurance that departmental funds are safeguarded	.671						
Assurance that monitoring procedures are established	.653						
Improvement of governance		.838					
Mitigation of financial risk		.769					
Improvement in the functioning of controls		.768					
Compliance with controls.		.700					
Prevention irregular expenditures			.891				
Prevention wasteful and fruitless expenditures			.877				
Prevention unauthorized expenditures			.860				
Validity of payments made				.888			
Validity of subsistence and travel allowance payment claims				.836			
Compliance of commitment (orders)				.797			
Validity and correctness of personnel-related claims				.506			
Revenue management					.706		
Correctness of bonuses paid over to employees					.667		
Management of department budget					.610		
ICU is not supported by the Management						.902	
The role of the ICU is not clearly communicated among the finance employees						.832	
ICU employees' independence and objectivity is impaired							.776
ICU has incompetent employees							.586

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 10 iterations.

The rotated component matrix converged in 10 iterations resulting in a pattern of factor loadings as shown in Table 4.9. The factor loadings display a seven-item solution. The results on this table indicate that nine items loaded onto component 1(ICU provides reasonable assurance that financial reliability and integrity is increased=.86, ICU provides reasonable assurance that operations efficiency is improved=.85, ICU provides reasonable assurance that an effective role in departmental activities is established=.83, ICU provides reasonable assurance that correct accounting data is availed=.83, ICU provides reasonable assurance that financial fraud is prevented=.80, ICU provides reasonable assurance that accurate financial information is provided to support strategic managerial decisions=.80, ICU provides reasonable assurance that better service delivery is attained=.77, ICU provides reasonable assurance that departmental funds are safeguarded=.67, ICU provides reasonable assurance that monitoring procedures are established=.65), associated with assurance activities performed by ICU, hence labeled *"provision of assurance services".*

Four items have loaded into component 2 (ICU require management support to improve governance=.84, ICU require management support to mitigate financial risk=.77, ICU require management support to improve the functioning of controls=.77, ICU require management support to provide reasonable assurance of compliance with controls=70) relates to the role of ICU with the department, hence labelled *"need for managerial support"* .

Three items have loaded into component 3 (ICU provides reasonable assurance that internal control unit is effective in preventing irregular expenditures=.89, internal control unit is effective in preventing wasteful and fruitless expenditures=.88 and internal control unit is effective in preventing unauthorized expenditures=.86) associated with activates performed by ICU to prevent financial mismanagement, hence labeled *"preventative measures for financial mismanagement".*

Four items have loaded into component 4 (ICU require management support to ensure all payments made are valid=.89, ICU require management support ensure the valid payments of subsistence and travel allowance=.84, ICU requires management support to compliance of commitment (orders) =.80 and ICU require management support to ensure the validity and correctness of personnel-related claims=.51) relate to the daily duties performed by ICU as a means of evaluating financial management activities, hence labelled *"weak monitoring and evaluating control activities".* Three items have loaded into component 5(ICU require management support to ensure revenue management requirements adhere to=.71, ICU require management support to ensure the correctness of bonuses paid over to employees=.67 and ICU require management support to ensure the department spend within its budget=.61) these relate to the measures of preventing over spending, also labeled *"budgetary constraints within ICU".*

Three items loaded into component 6 (ICU is not supported by the Management=.90 and ICU role is not clearly communicated among the finance employees=.83), related to the barriers on the nature and performance of ICU, hence labeled *"lack of operational support".* The last two items loaded into component 7 (ICU employees' independence and objectivity is impaired=.78 and ICU has incompetent employees=.59) these relate to the characteristics of ICU activities and individulas who perfomed them, hence also labeled *"lack of independence".*

Analysis of Variance
ANOVA is viewed as the most used statistical tools by researchers to determine whether the samples they have, has been drawn from population with similar means. The statistical tool ANOVA is usually used to identify statistical significance between different groups of data to ascertain their homogeneity (Page, et al., 2003).

Table 10: ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Work Position	Between Groups	24.432	4	6.108	13.692	.000
	Within Groups	46.840	105	.446		
	Total	71.273	109			
Years of experience	Between Groups	47.554	2	23.777	16.141	.000
	Within Groups	157.619	107	1.473		
	Total	205.173	109			

This study has used the one-way ANOVA to test the significance of differences in the results. The output provided the descriptive statistics detailing, the mean and standard deviation at 95% confidence intervals for the dependent variables work position and work experience as the only-demographic variables in consideration. Other categorical variables did not produce statistical significance; as a result they were eliminated. The data provides statistically significant results that the mean for work positions is not the same for all ranks (One-way ANOVA, F = 13.692, df = 4,105, P <0.001). Accordingly, statistically significant results indicate that the mean for years of experience is not the same for all years (One-way ANOVA, F = 16.141, df = 2,107, P <0.001). Tukey pos-hoc analysis was also conducted in order to further test the differences in the actual groups. As such, there was a statistical difference between the entry-level and State accountant, entry-level and senior state accountant, entry-level and Assistant Manager, entry-level and Manager or above with *p*-value= .001, *p*-value= .001, *p*-value= .001, *p*-value= .002 and *p*-value= .001 respectively.

Table 11: **Tukey HSD Working Position**

(I) What is your designation (working position)?	(J) What is your designation (working position)?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Entry level	State accountant	-.893*	.174	.000	-1.38	-.41
	Senior state accountant	-1.041*	.182	.000	-1.55	-.54
	Assistant Manager	-1.118*	.204	.000	-1.68	-.55
	Manager or above	-.851*	.221	.002	-1.46	-.24
*. The mean difference is significant at the 0.05 level.						

With regard to the years of experience, the Tukey pos-hoc analysis was also conducted to further test the differences in the actual groups. The dependent variable years of Experience displayed statistical difference between 0-1 year and 2-5 years, 0-1 year and more than 5 years with *p*-value= .001, *p*-value= .001 and *p*-value= .001 respectively. Other variables did not indicate the statistical difference; as such they were eliminated from the analysis.

5. Conclusion, Limitations and Implications

Although this study has significant contributions towards both practice and academia, it also has its limitations. As such, future research avenues have be recommended. One of the limitations was the fact that the study was confined only to the finance unit of the Eastern Cape Department of Rural Development and Agrarian Reform. Further studies can consider the entire South African government department that have internal control unit. This study have followed the quantitative research approach; perhaps further studies can use both qualitative and quantitative research design with a triangulation approach, where qualitative method can assist in attaining rich ideas and explanations, maybe the outcomes could be more helpful.

Besides the prevalent limitations, the study improves the knowledge about the importance of internal control unit role on financial management activities, seeing that there is no prior research conducted within South African context. The sample size for the study was set at 150 finance staff. Further research study may perhaps consider employing a larger sample size consists of all government departments, entities and the municipalities.

Findings

Despite the emerged limitations for this study, the results indicated that the relational and predictive factors leading to non-compliance with control activities are the poor communication of compliance procedures among finance employees, inadequate employee training, ICU lack of independence, lack of ICU independence, and lack of management support. These are the main deterrence to effectiveness of internal control activities. Solutions to the findings of this study are of assistance for both finance employees and research scholars. They also beneficial to the departments, as they enable them to achieve accountability and integrity, improve the implementation of its programmes and develop confidence among citizens and interested stakeholders. Lastly, they will produce new literature for the academics and add to the existing body of knowledge on the factors that lead to non-compliance in South African government departments.

Conclusion and Recommendations

Study sought to establish solutions to non-compliance issues and determine effects on performance within the Eastern Cape Department of Rural Development and Agrarian Reform (ECDRDAR). The study further sought to establish the effectiveness of internal control units in providing assurance, and enhancing operational compliance in departmental operations. The findings have implications to public service corporate governance matters as well as policy. Management should consider taking appropriate actions against non-compliance to strengthen compliance procedures. Provide employees with appropriate training, direction, and supervision to ensure they have the necessary knowledge and skills to carry out their duties; inform employees of the proper channels for reporting suspected improprieties. Management should commit itself to implementing recommendations from the ICU on the financial risk exposure that could hinder service delivery. Management should not interfere with the operations of the ICU function by giving them a freedom to execute their role without any influence.

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Paper 13

The attributes of success: Tourism-related entrepreneurs in Mtubatuba Local Municipality, South Africa

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Abstract: Previous studies have recognized entrepreneurs as a significant part of the global pursuit for sustaining economic development and social progress in the world. The attributes that lead to successful entrepreneurial undertaking need to be properly researched. This study therefore explores the entrepreneurial attributes that have significant impact in differentiating between successful and struggling tourism entrepreneurs in South Africa, using Mtubatuba Local Municipality as a case. A structured questionnaire survey was used to collect data. Convenience sampling was employed in selecting 124 tourism-related entrepreneurs in different regions of Mtubatuba Local Municipality, KwaZulu-Natal Province of South Africa. Data analyses were done using IBM's SPSS version 25 software. Descriptive (Frequency, Mean, Standard Deviation), bivariate (Spearman's Correlation test, Mann Whitney U test) and multivariate (Reliability test using Cronbach's Alpha) data analyses yield information to address research objectives. The results indicate that the entrepreneurial attributes that *somewhat* differentiate successful entrepreneurs from struggling entrepreneurs are: business drive and enthusiasm, being efficient and effective, and being visionary and having achievement motivation. This study also validates that socio-demographic variables in this study area, tend to be more useful in explaining the reasons for success or struggle among entrepreneurs than behavioural variables. This study recommends that Mtubatuba Local Municipality needs to organize targeted Tourism Development and Tourism Business Management education for the willing population of Mtubatuba Local Municipality, in collaboration with Tourism KwaZulu-Natal. By so doing, equal opportunity can be granted to anyone who wants to start-up and manage a new tourism business.

Keywords*: Entrepreneurship; Tourism entrepreneurship; Tourism entrepreneur; Entrepreneurial attributes; sub-Saharan Africa*

1. Introduction

In this changing world of commerce, entrepreneurs are a significant part of the global pursuit for sustained economic development and social progress in the world (Santhi, 2017). In South Africa, entrepreneurs have played a key role in changing the economic standard of living in the society. Researchers suggest that an entrepreneur is someone who exercises initiative by organizing a venture to take benefit of an opportunity (Goliath *et al.*, 2014; Rusu *et al.*, 2015; Iwu *et al.*, 2016; Khanna, 2016). Entrepreneurship is a driving force behind the socio-economic success of any nation (Ezeuduji & Ntshangase, 2017a). Previous research (Olomi & Sinyamule, 2009; Chenuba *et al.* 2011; Singh & Singh, 2016) provided valuable information regarding entrepreneurship. The aforementioned authors posit that entrepreneurship is used as an instrument to create more jobs and to eradicate poverty in the country. This means that, entrepreneurship has been considered as a key element in the process of growth, as it helps entrepreneurs create economic independence and improve their social status (Premand *et al.*, 2016; Villasana *et al.*, 2016). Earlier studies and researchers in the field of entrepreneurship focused on personal characteristics that differentiate entrepreneurs from non-entrepreneurs (Pirnar, 2015; De Souza *et al.*, 2016; Santhi, 2017). The entrepreneur is the person usually seen as a designer or an innovator of new business ideas.

The entrepreneur is someone engaged or active in entrepreneurial activity with a purpose of becoming self-employed (Rusu *et al.*, 2015). In as much as tourism entrepreneurs have a significant part to play in the South African economy and social progress (Pirnar, 2015), there are those who are regarded as successful

entrepreneurs and those who are regarded as struggling entrepreneurs. From the national and international literature reviewed, it becomes clear that in entrepreneurship studies that relate to distinguishing between successful and struggling entrepreneurs, there is still a dearth of literature from the sub-Saharan Africa. This study is significant for the global community, especially the sub-Saharan Africa, as it does not only add to the entrepreneurship literature, but also explores national or regional differences. Thus, the focus of this study is assessing the attributes of successful tourism-related entrepreneurs in Mtubatuba Local Municipality of KwaZulu-Natal, South Africa. This study area was chosen due to researchers' personal interest and knowledge that the local economy of Mtubatuba Local Municipality relies much on tourism. The next section explores the relevant literature related to this study.

2. Literature Review

Tourism is one of the most rapidly growing industries and an important economic activity in most countries worldwide (Solvoll *et al.*, 2015; World Travel & Tourism Council, 2017; Kallmuenzer & Peters, 2018). Also Solvoll *et al.* (2015) posit that tourism as an industry is highly affected by change; therefore, effective entrepreneurs are needed to sustain and secure this industry. The notion of a successful entrepreneur in this study relates to the perception that an entrepreneur has achieved the success he/she wants in his/her business (De Raffele, 2011), and interacts continuously with a diverse array of people such as actual customers (for example, tourists), potential customers, competitors and suppliers (Urban, 2014). A struggling entrepreneur in this study relates to an entrepreneur who has not achieved expected and desired results as an entrepreneur (Atsan, 2016). In relation to tourism entrepreneurship (which is the focus of this study), a struggling entrepreneur underperforms in terms of critical processes or desired targets in the tourism businesses (Cope, 2011; Atsan, 2016). These statements notwithstanding, the researchers sought to evaluate what makes one entrepreneur successful and another not successful or struggling in the South African tourism industry. The underperformance of the struggling entrepreneur represents one of the most difficult, complex and yet valuable learning experience that the entrepreneur needs to be engaged in, to understand entrepreneurship in terms of its causes and consequences for the individual entrepreneur, organizations and society at large (Atsan, 2016).

Based on the review and synthesis of relevant literature, it is discovered that different attributes are associated with tourism entrepreneurs some of which the researchers found very germane to the present study. Even though the attributes of entrepreneurs are seen as a crucial issue in the tourism businesses especially in small and medium enterprises, research in this field is still needed (Jonker *et al.*, 2009). Through this observation, this research explores the entrepreneurial attributes that have significant impact in differentiating between successful and struggling entrepreneurs in South Africa. There are studies indicating that entrepreneurs face various obstacles such as a lack of information on various aspects of business, excessive taxation, high rates of inflation, and a lack of financial assistance (Ezeuduji, 2015; Ismail *et al.*, 2016; Santhi, 2017). The study, based on the literature review, adopted attribute clusters, namely: innovation and networking; learning and resource acquisition; drive and enthusiasm; the use of technology; visionary and achievement motivation; level of preparedness for risk taking; and efficiency and effectiveness as the main attributes that may differentiate a successful tourism entrepreneur from a struggling entrepreneur in the South African tourism industry. Ahmad (2015) suggests that entrepreneurial ability is perceived as possession of abilities necessary for the starting and nurturing to growth of a new enterprise, especially in a competitive environment. The aforementioned attributes are assumed to be the key success factors, which are related to entrepreneurs.

The aim of this study is to explore the entrepreneurial attributes that have significant impact in differentiating between successful and struggling entrepreneurs, using Mtubatuba Local Municipality as a case. The seven entrepreneurial attributes mentioned earlier, were tested for significant results. The next section outlines how the study was designed, and how the data were collected and analyzed to reach study conclusions.

3. Methodology

In this research, the independent (success level of the entrepreneur) and dependent variables (seven entrepreneurial attributes mentioned earlier) were used to define the scope of the study, and both of these variables were not explicitly controlled by the researchers (Huff, 2009; Neneh, 2011; Neneh, 2015; Leggett, 2017). Survey research is a frequently used mode of observation in the social sciences (Babbie, 2017); hence, this study was designed as a survey, especially due to the fact that the constructs to be tested in this study are better presented in quantifiable ways. Survey entails researchers selecting a sample of respondents and administering a standardized questionnaire to each person in the sample. In most cases, tourism research needs quantitative data for researchers to get the required information (Nkwanyana *et al.*, 2016; Ezeuduji & Mbane, 2017). This research involves a large number of respondents (Goeldner & Ritchie, 2012), and a structured questionnaire was used in the sample survey. Questions in the questionnaire were set on a 5-point Likert scale: 1 - strongly agree, 2 – agree, 3 – neutral, 4 – disagree and 5 - strongly disagree. The quantitative approach allows us to generate statistical data and present it in frequencies, percentages and tables. The type of sampling used in this study was non-probability sampling as the research population is unknown (Veal, 2011). The researchers employed convenience sampling in selecting tourism-related entrepreneurs doing business in different regions of Mtubatuba Local Municipality, KwaZulu-Natal Province of South Africa.

In some of the places where the study was conducted, the researchers along with the tourism-related entrepreneurs had an agreement that the questionnaires were to be dropped and later collected (weekly and at times after two weeks). A total of 150 questionnaires were distributed, however the researchers used 124 questionnaires that were fully completed, for analyses. This sample size of 124 entrepreneurs was considered large enough to reach conclusions on the research purpose, especially as the number of tourism entrepreneurs in this locality is unknown and not relatively large compared to the number of those in bigger cities or towns in KwaZulu-Natal, such as Durban, Pietermaritzburg, or Richards Bay. The respondents were chosen based on convenience and availability, when the researchers visited the business areas. The participants were fully informed of the purpose of the study before they participated in the study. Furthermore, participants were given assurance of privacy, confidentiality and anonymity with regard to the information provided. The questionnaire variables consisted of close-ended questions in a form of matrix questions, to save time for respondents, and to increase the comparability of responses (Chawla & Sondh, 2011).

Data analyses were done using IBM's SPSS version 25 software for statistical purposes. Descriptive statistics were used to generate frequency of respondent's profile (in percentages), mean scores, and standard deviation. Bivariate analyses (comparing two variables) employed Spearman's Correlation (two-tailed) and Mann-Whitney U tests to check for relationships between variables (Bolboacă *et al.*, 2011). For the purpose of data analysis using Mann-Whitney U test, variables such as respondents' ethnic group and age group were re-recoded into two categories. The ethnic group variable was recoded from "Black Africans, White, Indian and Colored" to "Black" (consisting of Black Africans, Indians, and Colored) and "White", while the age group was recoded from "18 - 29, 30 - 39, 40 - 49, 50 – 59, 60 and above" to "Below 40 years", and "40 years and above", to allow the calculation of the Mann-Whitney U test. The reliability test (using Cronbach's Alpha) was conducted to check for the level of internal consistencies of variables used to explain seven dimensional entrepreneurs' attributes (drive and enthusiasm, efficiency and effectiveness, innovation and networking, learning and resource acquisition, level of preparedness for risk taking, use of technology, and visionary and achievement motivation). The reliability tests conducted show internal consistency among variables used to explain all the entrepreneur success attributes. Bivariate tests (Spearman's Correlation and Mann-Whitney U) were conducted at 95% confidence interval.

4. Results and Discussion

The respondents that participated in the study were tourism-related entrepreneurs from different tourism-related businesses, mostly from the Saint Lucia town and around Mtubatuba town (in the same Municipality: Mtubatuba Local Municipality). The results in Table 1 show that majority of the respondents were South Africans (75%); and female respondents were somewhat in the majority (about 58%). The sample consists

more of the White racial group (about 53%), suggesting that they dominate the tourism industry in this region.

Table 1: Profile of the respondents (N = 124)

Variable	Category	Frequency (%)
Origin	South African	75
	Non South African	25
Gender	Female	58.1
	Male	41.9
Ethnic group	Black (Black Africans, Indians, and Coloured)	46.8
	White	53.2
Age group	Below 40 years	42.7
	40 years or above	57.3
Number of years in business	6 years or below	70.2
	Above 6 years	29.8
Highest level of education	No western education	10.5
	Primary education	16.1
	Secondary education (Matric)	35.5
	Tertiary education (University, College / TVET)	37.9
Type of business	Accommodation	45.2
	Food and Beverage	14.5
	Events Management	12.9
	Tour Operation	7.3
	Travel Agency	4.0
	Tour Guide	6.5
	Car rentals	6.5
	Resorts	2.4
	Consultancy	0.7
Perceived classification regarding level of success as tourism entrepreneur	Very successful entrepreneur/ business owner	9.7
	Successful entrepreneur/ business owner	27.4
	Surviving entrepreneur/ business owner (neither successful nor unsuccessful, but just surviving)	38.7
	Struggling entrepreneur/ business owner (struggling to survive in the business world)	18.5
	Unsuccessful entrepreneur/ business owner	5.7

About 43% of the respondents were below 40 years old, and about 57% of the respondents were above 40 years old, reflecting that the sample is relatively matured or older. Age is an important factor in exploring the entrepreneurial attributes that have significant impact in differentiating between successful and struggling entrepreneurs (Bruwer & Smith, 2018). It has been argued that the younger people are more involved in participating in the entrepreneurial activities, however, most of them failed to demonstrate the level of maturity along the way, and that results in a high rate of failure in tourism businesses (Ramasobana & Fatoki, 2017). In this study, most of the respondents are fairly new in the tourism businesses (about 70% of the population are 6 years or below in the business, while about 30% are above 6 years in the business).

About 36% of the respondents have secondary education (matriculated), and about 38% have tertiary education (University, College / TVET), revealing that the general educational level is not a significant barrier for South African tourism entrepreneurs to enter the industry. The results reveal that the majority of respondents are owners of accommodation businesses. About 10% of the respondents classified themselves as "very successful entrepreneur/business owner," and about 27% of the entrepreneurs see themselves as "successful entrepreneur/business owner". About 39% of the respondents perceived themselves as surviving entrepreneurs/business owners (neither successful nor unsuccessful), and about 19% as struggling

entrepreneurs/business owner (struggling to survive in the business world). Only about 6% classified themselves as unsuccessful entrepreneurs or business owners in the study area.

Results in Table 2 through Table 8 show that respondents tend to agree mostly to the entrepreneur attributes statements in the questionnaire. Testing the relationship between entrepreneur's statements on "learning and acquiring resources" on the one hand; and "level of education", "entrepreneur success level", and "entrepreneur's profile" on the other hand, yield interesting results for this study (see Table 2).

Table 2: Relationship between entrepreneurs' perceptions of "learning and acquiring resources"; and level of education, entrepreneur success level, and entrepreneurs' profile

Learning and acquiring resources - Statements	Mean[a]	Correlation with level of education[b]	Correlation with entrepreneur success level[b]	Compared with entrepreneurs' profile[c]
South African entrepreneurs or business owners lack the expertise to develop tourism in South Africa	2.00	**, negative	N.S	**age group – 40 years and above agree more
Attending business courses **before** starting tourism business is important	1.84	**, negative	N.S	** age group – 40 years and above agree more
Attending any business courses **after** starting tourism business is important	1.87	**, negative	N.S	* age group – 40 years and above agree more
I have the ability to learn from failure	1.83	N.S	N.S	N.S
I was able to acquire resources on my own to start a tourism business	1.87	*, negative	N.S	N.S
I have a strong skill of acquiring financial resources to run my business	2.04	*, negative	N.S	N.S
I have the ability to learn new ways of doing things	1.81	N.S	N.S	N.S

Reliability Statistics (learning and acquiring resources), Cronbach's Alpha =.754, N of Items = 7, Valid cases = 124 (100%), Excluded cases = 0 (0%), Total = 124

Notes: [a] Questionnaire were itemized along a 5-point Likert-type scale ranging from 1, Strongly agree; 2, Agree; 3, Neutral; 4, Disagree; 5, Strongly disagree.
[b] Spearman's Rank correlation (2-tailed) test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.
[c] Mann-Whitney U test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.

The results, as shown in Table 2, indicate there is no significant correlation between entrepreneurs' statements on "learning and acquiring resources" and entrepreneur success level. The more educated the entrepreneurs are, the more they agree to most of the entrepreneurial attributes statements depicting "learning and acquiring resources". Also entrepreneurs who are 40 years old and above agree more to the 3 statements shown above, compared with those who are younger in age. Interestingly, this evidence posits that entrepreneurial success has some relationships with 'the level of maturity' and 'the level of education' of the responding entrepreneurs. These results support research findings by Urban (2014), Ahmad (2015), and Premand *et al.* (2016) regarding positive relationships between entrepreneurial abilities and the level of

maturity. Hsiung (2018) also argues that the entrepreneur's managerial ability can be acquired through learning.

In Table 3, relationship tests were conducted between entrepreneurs' statements on "innovative thinking and networking" on the one hand; and "level of education", "entrepreneur success level", and "entrepreneur's profile" on the other hand.

Table 3: Relationship between entrepreneurs' perceptions of "innovative thinking and networking"; and level of education, entrepreneur success level, and entrepreneurs' profile

Innovative thinking and networking - Statements	Mean[a]	Correlation with level of education[b]	Correlation with entrepreneur success level[b]	Compared with entrepreneurs' profile[c]
Innovation and networking are important aspects for the entrepreneur in daily business operations	1.46	**, negative	N.S	** age group – 40 years and above agree more
As an entrepreneur, I depend on my own creativity to develop my business and to make a mark in the industry	1.80	N.S	N.S	N.S
I believe that networking is often connected with the notion of friendship to overcome competition	1.63	N.S	N.S	N.S
I know how to create better products and services in my business	1.91	N.S	N.S	*White ethnic group agree more than Black ethnic group
Sometimes I depend on other business owners to be successful	2.21	**, negative	N.S	N.S
Networking is one of the ways for entrepreneurs to know each other's product offerings	1.88	N.S	N.S	N.S
I believe my business will grow quicker if I form connections with or become a member of professional bodies	1.88	**, negative	N.S	N.S

Reliability Statistics (innovative thinking and networking), Cronbach's Alpha =.779, N of Items = 7, Valid cases = 124 (100%), Excluded cases = 0 (0%), Total = 124

Notes: [a] Questionnaire were itemized along a 5-point Likert-type scale ranging from 1, Strongly agree; 2, Agree; 3, Neutral; 4, Disagree; 5, Strongly disagree.
[b] Spearman's Rank correlation (2-tailed) test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.
[c] Mann-Whitney U test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.

The results in Table 3 show that there are no significant correlations between the respondents' agreements to the entrepreneurial attribute – "innovative thinking and networking" and their perceived "entrepreneur success level". The results also show that the respondents who are 40 years and above agree more than those who are below 40 years of age with this statement: 'innovation and networking are important aspects for the entrepreneur in daily business operations'. Results also show that the White ethnic group agrees more than

the Black ethnic group with this statement: 'I know how to create better products and services in my business'. This provides possible explanations as to why many tourism businesses owned by youths and the Black ethnic group have less survival rates in South Africa. This gives room for further research. Regarding those who are below 40 years of age, the results in this study confirm the conclusion reached by Ezeuduji and Ntshangase (2017b) in that the tourism entrepreneurs, especially youths, are facing a number of difficulties: lack of expertise to carry out an economic activity, lack of training, and lack of skills in the field of management and marketing. The results in Table 3 however show that respondents with higher level of education agree more with the three statements shown in this table. These results partially contradict the findings of Lopes *et al.* (2014) and De Souza *et al.* (2016) who posit that the success of an entrepreneur does not depend on the level of education.

Table 4: Relationship between entrepreneurs' perceptions of "business drive and enthusiasm"; and level of education, entrepreneur success level, and entrepreneurs' profile

Business drive and enthusiasm - Statements	Mean[a]	Correlation with level of education[b]	Correlation with entrepreneur success level[b]	Compared with entrepreneurs' profile[c]
I feel motivated and energetic to make a difference in the South African tourism industry	1.60	N.S	N.S	* age group – 40 years and above agree more *Entrepreneurs who are more than 6 years in business agree more
How to run my business successfully is always in my mind	1.60	N.S	N.S	N.S
I think I am one of the best entrepreneurs in South Africa	2.03	*, negative	N.S	*Females agree more than males
I feel very attached to my business	1.82	N.S	N.S	N.S
It would be difficult for me to get rid of my business	1.73	N.S	*	N.S
It would be easy for me to start another tourism business because of experience and energy that I have	2.06	N.S	N.S	* age group – 40 years and above agree more
I always want to achieve greater things	1.81	N.S	**	* Females agree more than males

Reliability Statistics (business drive and enthusiasm), Cronbach's Alpha =.710, N of Items = 7, Valid cases = 124 (100%), Excluded cases = 0 (0%), Total = 124

Notes: [a] Questionnaire were itemized along a 5-point Likert-type scale ranging from 1, Strongly agree; 2, Agree; 3, Neutral; 4, Disagree; 5, Strongly disagree.
[b] Spearman's Rank correlation (2-tailed) test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.
[c] Mann-Whitney U test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.

The results in Table 4 suggest that the higher the level of Western education of the entrepreneurs, the more they believe in being some of the best in the nation. The results also show that those who are more than 6 years in business agree more than those who are less than 6 years in business that: 'they feel motivated and energetic to make a difference in the South African tourism industry'. Neneh (2011) states that those who had no prior business experience probably inherited the business from their family members without any prior experience in managing the business. They have a bigger chance of not doing well in their businesses. Hence, this study agrees that training programs are very important and should be provided to low-skilled tourism entrepreneurs for the long-term survival of their businesses (Ezeuduji & Ntshangase, 2017b; Boermans &

Willebrands, 2017; Santhi, 2017; Kallmuenzer & Peters, 2018). Such a lack of business skills is one of the crucial barriers to a firm's success (Pirnar, 2015; Omerzel, 2016). Interestingly, the results obtained from this study also suggest that females are more energetic and confident than males. Females agree more than males to these statements: 'I think I am one of the best entrepreneurs in South Africa', and 'I always want to achieve greater things'. This is enough evidence to state that females in this study agreed more to a strong business drive and enthusiasm than their male counterparts. Rasul *et al.* (2016) opine that these are common characteristics that describe successful entrepreneurs. Again, respondents who are 40 years and above agree more than their younger counterparts regarding business motivation. Results also show that there are significant correlations between the respondents' agreements to the entrepreneurial attribute – 'business drive and enthusiasm' regarding the statements: 'It would be difficult for me to get rid of my business', 'I always want to achieve greater things'; and their perceived 'entrepreneur success level'. This means that entrepreneurs who perceive themselves as being successful are more likely to retain their business and they do want to achieve greater things.

Table 5: Relationship between entrepreneurs' perceptions of "use of technology in the business"; and level of education, entrepreneur success level, and entrepreneurs' profile

Use of technology in the business - Statements	Mean[a]	Correlation with level of education[b]	Correlation with entrepreneur success level[b]	Compared with entrepreneurs' profile[c]
The most important resource for tourism business is the Internet	1.67	*, negative	N.S	** age group – 40 years and above agree more
Technology has a significant role in the success of the tourism entrepreneur	1.73	*, negative	N.S	*South Africans agree more than non-South Africans
It helps to get additional technology education and training on an ongoing basis as an entrepreneur	1.66	**, negative	N.S	N.S
The entrepreneur will struggle if she/he lacks modern technology	1.84	N.S	N.S	** Females agree more than males * South Africans agree more than non-South Africans
The entrepreneur's competitiveness increases by introducing and using modern technologies	1.77	N.S	N.S	** Females agree more than males * Entrepreneurs who are 6 years or below in business agree more
An entrepreneur cannot communicate effectively with his/her customers if he/she cannot use technology	1.87	N.S	N.S	** Females agree more than males
Modern technology is a very important source of information for an entrepreneur	1.75	N.S	N.S	** Females agree more than males

Reliability Statistics (use of technology in the business), Cronbach's Alpha =.830, N of Items = 7, Valid cases = 124 (100%), Excluded cases = 0 (0%), Total = 124

Notes: [a] Questionnaire were itemized along a 5-point Likert-type scale ranging from 1, Strongly agree; 2, Agree; 3, Neutral; 4, Disagree; 5, Strongly disagree.
[b] Spearman's Rank correlation (2-tailed) test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.
[c] Mann-Whitney U test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.

Table 5 indicates that the respondents with a higher level of education agree more strongly to the entrepreneurial attributes statements that show significant results. However, there are no significant results between the level of education and entrepreneurial attributes statements that are labelled N.S. In Table 5, the respondents who are 40 years and above agree more than those who are below 40 years of age, with this statement: 'the most important resource for tourism business is the Internet'. This is in line with the findings of Mamabolo *et al.* (2017) and Tichaawa (2017) who argued that the success of an entrepreneur greatly depends on the attributes of the entrepreneur including the use of technology. Moreover, South Africans agree more than non-South Africans to these statements: 'technology has a significant role in the success of the tourism entrepreneur'; 'the entrepreneur will struggle if she/he lacks modern technology'. This concurs with previous studies that recognize technology as a key role player in determining the success of the tourism entrepreneur and the tourism business (Alsos *et al.*, 2014; Africa Tourism Monitor, 2016). Female entrepreneurs tend to support the necessity of the use of technology in the business, more than their male counterparts.

Table 6: Relationship between entrepreneurs' perceptions of "being visionary and having achievement motivation"; and level of education, entrepreneur success level, and entrepreneurs' profile

Being visionary and having achievement motivation - Statements	Mean[a]	Correlation with level of education[b]	Correlation with entrepreneur success level[b]	Compared with entrepreneurs' profile[c]
I know where I will be or what I will achieve as a business owner in 5 years' time	1.65	N.S	N.S	* Females agree more than males
Lack of acceptance of personal responsibility for outcomes can hinder the entrepreneur's success	1.82	*, negative	N.S	N.S
I enjoy facing and overcoming obstacles to my ideas	1.86	N.S	N.S	N.S
Entrepreneurial achievement motivation is one of the key components for entrepreneurial success	1.68	N.S	N.S	* Females agree more than males
I know how to set goals and reaching these goals through my own effort	1.87	N.S	N.S	N.S
I have love and passion for work in the tourism industry	1.78	N.S	N.S	** White ethnic group agree more than Black ethnic group
Hard work is very important for entrepreneurial success	1.71	N.S	*	N.S

Reliability Statistics (being visionary and having achievement motivation), Cronbach's Alpha =.780, N of Items = 7, Valid cases = 124 (100%), Excluded cases = 0 (0%), Total = 124

Notes: [a] Questionnaire were itemized along a 5-point Likert-type scale ranging from 1, Strongly agree; 2, Agree; 3, Neutral; 4, Disagree; 5, Strongly disagree.
[b] Spearman's Rank correlation (2-tailed) test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.
[c] Mann-Whitney U test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.

In Table 6, results indicate that the respondents with a higher level of education agree more strongly to the entrepreneurial attributes statement that shows significant result (lack of acceptance of personal responsibility for outcomes can hinder the entrepreneur's success). The results also show that females agree more than males with these statements: 'I know where I will be or what I will achieve as a business owner in 5 years' time', and 'entrepreneurial achievement motivation is one of the key components for entrepreneurial success'. Some scholars submit that the psychological characteristics associated with entrepreneurship are needed for achievement. Previous studies such as Neneh (2011) and Chen *et al.* (2012) posit that the individuals who had a great need for achievement possessed five important qualities, namely, the individual responsibility; moderate risk taker; knowledge of results of decisions; novel instrumental activities and the anticipation of the future possibilities. Entrepreneurs from the White ethnic group agree more than those from the Black ethnic group with this statement: 'I have love and passion for work in the tourism industry'. One can argue that the majority of the entrepreneurs from the Black ethnic group do not have enough strong achievement motivation to excel in their businesses. Entrepreneurs who have high achievement motivation also have attitude and behaviour which support their aims (Sutanto & Eliyana, 2014). Results also show that there is a significant correlation between the respondents' agreements with the entrepreneurial attribute – "being visionary and having achievement motivation" regarding the statement: 'hard work is very important for entrepreneurial success'; and their perceived 'entrepreneur success level'. This means that entrepreneurs who perceive themselves as being successful are more likely to believe in hard work to achieve success. Being visionary and having achievement motivation can translate into action in order to have a significant impact on the business performance (Neneh, 2015).

Table 7: Relationship between entrepreneurs' perceptions of "preparedness for risk taking"; and level of education, entrepreneur success level, and entrepreneurs' profile

Preparedness for risk taking - Statements	Mean[a]	Correlation with level of education[b]	Correlation with entrepreneur success level[b]	Compared with entrepreneurs' profile[c]
No matter what the odds, if I believe in something, I make it happen	1.88	N.S	N.S	N.S
I always fix things that I do not like immediately	1.64	*, negative	N.S	* age group – 40 years and above agree more
It is good to take some level of risks to succeed as a business owner	1.75	*, negative	N.S	N.S
I test my abilities by engaging myself in complex tasks	1.81	N.S	N.S	* Females agree more than males * Entrepreneurs who are 6 years or below in business agree more
I am always looking for better ways to do things	1.87	N.S	N.S	N.S
Wherever I have been, I have been a powerful force for creating change	2.08	N.S	N.S	N.S
Taking calculated risks comes with being an entrepreneur	1.89	N.S	N.S	* South Africans agree more than non-South Africans

Reliability Statistics (preparedness for risk taking), Cronbach's Alpha =.700, N of Items = 7, Valid cases = 124(100%), Excluded cases = 0 (0%), Total = 124

Notes: [a] Questionnaire were itemized along a 5-point Likert-type scale ranging from 1, Strongly agree; 2, Agree; 3, Neutral; 4, Disagree; 5, Strongly disagree.
[b] Spearman's Rank correlation (2-tailed) test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.
[c] Mann-Whitney U test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.

The results in Table 7 show that the higher the level of Western education of the entrepreneurs, the more they believe in the entrepreneurial attributes of "preparedness for risk taking" which has to do with 'fixing

things that I do not like immediately', and 'it is good to take some level of risks to succeed as a business owner'. The results reveal that the respondents who are 40 years and above agree more, compared with those who are below 40 years old with this statement: 'I always fix things that I do not like immediately'. Females and entrepreneurs who have been in business for 6 years or less agree more with this statement: 'I test my abilities by engaging myself in complex tasks'. South Africans agree more than non-South Africans with this statement: 'taking calculated risks comes with being an entrepreneur'. Two of the most important attributes for any business to grow are risk-taking and how one organizes him or herself (Omerzel, 2016). A real entrepreneur cannot put aside whatever problems she/he is facing; the entrepreneur must solve that problem (Bruwer & Smith, 2018). These findings strongly support those of Mohamed and Baqutayan (2016), and Boermans and Willebrands (2017). They posit that the risk attitude dimension is the most important entrepreneur's attribute for success, as the risks-taking behaviour is an example of courage that must be possessed by the entrepreneurs. However, for this study there is no correlation between entrepreneur success level and attributes describing the preparedness for risk taking dimension.

Table 8: Relationship between entrepreneurs' perceptions of "being efficient and effective"; and level of education, entrepreneur success level, and entrepreneurs' profile

Being efficient and effective - Statements	Mean[a]	Correlation with level of education[b]	Correlation with entrepreneur success level[b]	Compared with entrepreneurs' profile[c]
I am good at turning resources into profitable outcomes	1.74	**, negative	N.S	** age group – 40 years and above agree more
I am very concerned if I or my employees make mistakes	1.63	N.S	N.S	* age group – 40 years and above agree more * White ethnic group agree more than Black ethnic group * Entrepreneurs who are 6 years or below in business agree more
I know how to anticipate problems in advance and deal with them before they occur	1.90	**, negative	N.S	** age group – 40 years and above agree more * Females agree more than males
I am always working hard towards delivering products or services to the customers on time	1.75	**, negative	N.S	** Females agree more than males
I am constantly seeking to improve my business operations	2.17	**, negative	N.S	** age group – 40 years and above agree more
I get myself or my employees regularly trained to do things better	1.90	N.S	N.S	** Females agree more than males
I am always making profit in my business	1.91	N.S	**	** White ethnic group agree more than Black ethnic group

Reliability Statistics (being efficient and effective), Cronbach's Alpha =.803, N of Items = 7, Valid cases = 124 (100%), Excluded cases = 0 (0%), Total = 124

Notes: [a] Questionnaire were itemized along a 5-point Likert-type scale ranging from 1, Strongly agree; 2, Agree; 3, Neutral; 4, Disagree; 5, Strongly disagree.
[b] Spearman's Rank correlation (2-tailed) test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.
[c] Mann-Whitney U test significance: N.S, no significant results; *, $p < 0.05$; **, $p < 0.01$.

In Table 8, the results show no significant differences between the level of education and other entrepreneurial attributes statements that are labelled N.S. In summary, the higher the level of Western

education the entrepreneurs possess, the more they believe in being profitable, proactive, effective, and optimizing business operations. Similarly, entrepreneurs with much of the socio-demographic characteristics described before tend to be consistent with their support of the previous entrepreneurial attributes discussed, and the entrepreneurial attribute of being efficient and effective. Being efficient and effective are valued in entrepreneurial activities, for the entrepreneurs to become successful. Actually, Antonites *et al.* (2007) strongly argue that efficiency and effectiveness are the factors that represent an individual's actual control over the psychological behaviour. Results also show that there is a significant correlation between the respondents' agreement to the entrepreneurial attribute – "being efficient and effective" regarding the statement: 'I am always making profit in my business' and 'entrepreneur success level'. This means that entrepreneurs who perceive themselves as being successful believe that they are always making profit in their businesses and could therefore be the reason why they are successful. Based on the body of research on personality and entrepreneurship, entrepreneurs have to be efficient and effective as part of their personality traits to control their behaviour and navigate business opportunities (Singh & Rahman, 2011).

5. Conclusion and Recommendations

Based on these findings, this study therefore concludes that the entrepreneurial attributes that *somewhat* differentiate successful entrepreneurs from struggling entrepreneurs are: business drive and enthusiasm, being efficient and effective, and being visionary and having achievement motivation. The results of this study, therefore, indicate that the socio-demographic variables such as 'level of Western education', 'age', 'cultural group', 'business experience', 'gender', and 'nationality' have significant influences on how entrepreneurs respond to acquiring entrepreneurial attributes than 'entrepreneurs' success level perceptions'. This is quite interesting to note as socio-demographic variables tend to explain the reasons for success or struggle among entrepreneurs (based on entrepreneurial attributes as mediating factors). These study results are particular to the study area (Mtubatuba Local Municipality) at the time the study was conducted, and cannot be generalized across regions and nations. This study has limitation as it made use of convenience sampling (a non-probability sampling method). It therefore implies that one has to be careful in interpreting or implementing the results, as the results can be statistically argued to not be representative of the study population (Mtubatuba Local Municipality). This study however is significant as it contributes to the body of knowledge regarding the explanation of the reasons for success or struggle among entrepreneurs.

Based on the findings of this research, few recommendations are offered to Mtubatuba Local Municipality decision-makers (business support offices), as well as Tourism KwaZulu-Natal (the provincial Destination Management Organization). Tourism KwaZulu-Natal and Mtubatuba Local Municipality business support officers should support tourism entrepreneurs by organizing workshops and seminars related to tourism entrepreneurship at different towns and villages of the local municipality, targeting prospective and current entrepreneurs. Equal opportunity can be granted to anyone who wants to start-up and manage a new tourism business. Workshops should be developed to meet the conditions for effective learning and developing other entrepreneurial attributes identified by this study. This will help in creating professional networks and establishing a shared understanding among prospective and existing tourism entrepreneurs. By so doing, prospective and inexperienced entrepreneurs can learn from the experienced ones. Further research on this topic or related topics is needed in other regions of South Africa and sub-Saharan Africa to identify regional differences or similarities.

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Paper 14

Product characteristic determinants of South African showroomers' behaviour: A brick-and-click value perspective

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Abstract: Showrooming as consumer behaviour phenomenon in multichannel retailing has grown in importance in South Africa. In showrooming, consumers visit an offline retail store ("brick") for product information gathering purposes and consequently purchase online ("click") at a competing retailer. This study draws on Daunt and Harris' (2017) research, employing a value-based service-dominant theoretical lens. Showrooming is conceptualized as a two-stage process of in-store value taking and online value co-creation/co-destruction. Utilizing survey data from 225 South African showroomers, SPSS is employed to assess a research model, consisting of 4 hypotheses. The paper's findings reveal that Daunt and Harris' (2017) developed market findings are mostly aligned with the product characteristic determinants of emerging market consumers' showrooming. However, the product speed of technological change, is not substantiated in an emerging market such. The study's value lies in it being the first empirical investigation of consumer showrooming behaviour in an emerging market, through a service-dominant logic lens. It appears to be the first empirical measurement of Daunt and Harris' (2017) model of consumer showrooming, focusing on product characteristics as antecedents of showrooming behaviour. Lastly, it contributes to theoretical and managerial inquiry of in-store value taking and online value co-creation/co-destruction behaviour in an emerging market.

Keywords: *Showrooming behaviour, Multichannel retailing, Online value co-creation/co-destruction, In-store value taking behaviour, Emerging market.*

1. Introduction and Background

The South African retail experience has been revolutionized by the proliferation of the Internet, smartphones, hand-held digital devices and social media. More importantly, the *integration* of these channels in both "brick" (brick-and-mortar stores or offline) and "click" (online) marketing, has led to a transformation in the retail behaviours of the past. Consumers are therefore, exposed to multiple channels before ultimately making a purchase. From a retailer perspective, the instrumental inception of the Internet as a retail channel has similarly created opportunities for multichannel retailing (Basak, *et al.,* 2017). Zhang, *et al.* (2010) define multichannel retailing as the collection of activities when selling products or services to consumers through more than one channel. Essentially, it therefore entails the practice of selling similar products, using multiple channels, through diverse platforms with the intention to engage consumers towards a purchase.

In a multichannel retailing environment, considering a brick-*versus*-click perspective is obsolete, with the future retail reality of brick-*and*-click; especially in emerging markets like South Africa (Nielsen, 2017). In July 2018, De Matos Silva (2018) described the South African digital landscape to have 28.5 million Internet users, equating to 52% of the South African population being online users, of which 74% are using mobile phones. Urgerer (2019) however argues that South African consumers still rely on in-store purchases for their shopping experiences, partly attributing it to the challenges around accessibility of mobile solutions as a result of exceptionally expensive data. Still, Statista (2019) reports the South African eCommerce revenue market amounts to US$3,308 million, expecting an annual growth rate of 9.9% (2019-2023). This will result in a market volume of US$4,817 million by 2023. It should therefore be acknowledged that South Africa is not as advanced as first world markets in this regard, but that these statistics provide evidence of a trajectory of South Africa rising its digital landscape into prevalence.

Against this backdrop of increased online sales in South Africa, the actual consumer behaviour in multichannel retailing remains complex, as the brick-and-click channels continue to blur. One such consumer behaviour development is consumer showrooming (Gensler, *et al.,* 2017). Daunt and Harris (2017) view showrooming as a form of multichannel shopping and predicate that it entails differing degrees of value taking and value co-creation/co-destruction behaviours across brick-and-click channels in the consumer purchasing process. For the purpose of this paper, showrooming is defined as "the activity of consumers viewing and gathering information, and at times, trying products at brick-and-mortar retail stores, but making the actual purchase online from a brick-and-mortar retailer often at a lower price." (Burns, Gupta & Hutchins, 2019). One of the results of showrooming is that traditional brick-and-mortar stores provide product information to the consumer, while the product sale happens online (via clicking behaviour), resulting in no revenue earnings for the traditional store, despite the resources and efforts put in to showcase the product (Basak *et al.*, 2017). As such, brick-and-click consumer behaviour assists consumers to capitalize on the benefits of shopping from both brick-and-click channels (Arora & Sahney, 2018). Daunt and Harris (2017) refer to this change in consumer channel behaviour as a "shift in the rules of exchange", resulting in showrooming being regarded as a form of value co-destruction (Zhang, Lu, Torres & Chen, 2018; Surachartkumtonkun, McColl-Kennedy & Patterson, 2015; Plé & Chumpitaz Cáceres, 2010).

This paper forms part of a larger study which responds to the need for research in value co-creation/value co-destruction behaviour, specifically from a showroomer perspective (Neslin & Shankar, 2009; Ostrom, Parasuraman, Bowen, Patricio & Voss, 2015; Verhoef, Neslin & Vroomen, 2007). Correspondingly, the broader study attempts to address Robertson, Polensky and McQuilken's (2014) call for the necessity of such an examination as a result of the growth in online shopping and interactive media in a technology-enabled environment. This study draws on the service-dominant logic paradigm – suggestive of Taylor and Hunter (2015) and Quach and Thaichon (2017) – to explore value taking and value co-creation/co-destruction behaviour of South African showroomers using Daunt and Harris' (2017) conceptual research model. This research model conceptualizes product, consumer and channel characteristics as antecedents of a distinctly two-phased (in-store value taking and online value co-creation/destruction) view of consumer showrooming. The scope of the current paper, however, focuses specifically on product characteristics as antecedents of the two phases of consumer showrooming in South Africa, namely in-store value taking and online value co-creation/co-destruction. It is against this backdrop that the following research objective guides this paper:
To explore and describe the product characteristics as antecedents of in-store value taking and online value co-creation/co-destruction by South African showroomers.

Consequently, this study's contribution is threefold. First, this paper represents the first empirical investigation of consumer showrooming behaviour in an emerging market, namely South Africa, through the lens of the service-dominant logic. Secondly, this study appears to be the first application of the Daunt and Harris (2017) model of measuring consumer showrooming, by focusing on the product characteristics, as antecedents of consumer showrooming in an emerging market context. Thirdly, the study adds uniquely to the theoretical and managerial understanding of in-store value taking and online value co-creation/co-destruction behaviour in an emerging market. The paper starts with a literature review, consisting of a brief discussion of consumer showrooming, followed by the theoretical lens (service-dominant logic) grounding the study, as well as value-taking and value co-destruction/co-creation behaviour of showroomers. Subsequently, the proposed research model based on the work of Daunt and Harris (2017) is discussed to guide the hypotheses of this paper. In the methodology section, the methodological choices of the study are presented. The results and discussion are followed by conclusions and recommendations, as well as suggestions for further research.

2. Consumer Showrooming

The "always on" customers (Fernández, *et al.,* 2018) in the multi-channel retail environment use different mixes and sequences of channels in their shopping behaviour. Rapp, *et al.* (2015) view showrooming as a relatively new phenomena and describe it as the consumer behaviour of visiting a brick-and-mortar store, with the intension to purchase online. In contrast, Arora and Sahney (2018) see showrooming as not new in its entirety, but rather that some parallels can be drawn between showrooming and a number of existing

customer behaviour concepts, such as cross-channel free-riding behaviour (Van Baal & Dach, 2005), research shopping (Verhoef *et al.*, 2007), and hybrid shopping behaviour (Kalyanam & Tsay, 2013). This parallelism lies in customers using different channels in a single purchase process.

The benefits of using different channels in a single purchase process – in the case of showrooming first brick, and then click behaviour – are based on the perceived gain in quality, price competition, in-store assistance and the anticipated regret that motivate customers to showroom (Arora & Sahney, 2018). In contrast to the benefits of showrooming, scholars have also studied the negative impact of showrooming. Studies in this regard include the negative effect of showrooming on the profitability of offline retailers (Balakrishnan, Sundaresan & Zhang, 2014; Mehra, Kumar & Raju, 2014); and Rapp *et al.*'s (2015) study on the effect of showrooming on the self-efficacy and performance of in-store salespeople. As a result, many retailers have developed tactics to combat showrooming by specializing their offerings and making comparative shopping difficult (Zimmerman, 2012).

Central to the study of consumer showrooming is the purposeful benefit-seeking behaviour from information and services of one retailer in one channel, before purchasing from a different retailer in a different channel. Showroomers therefore knowingly take value from channel members but does not reciprocate with the original channel from which value was purposefully taken. It is against this background, that the service dominant logic provides a fitting means with which to consider the showrooming phenomenon.

Showrooming through a service-dominant logic theoretical lens
The highly prominent service dominant logic (S-D logic) of Vargo and Lusch (2008; 2009; 2014) has facilitated a "gestalt shift" (Wright & Russell, 2012) in marketing thought. This change in marketing, is greater than the long-established divide between goods and services and, at its core, instead, postulate that service is the engrained source of any exchange (Vargo & Lusch, 2014). Wright and Russell (2012) similarly argue that goods are not products for sale but are "physical instantiations of bundles of service". In retailing, the example of purchasing a smart phone could clarify this idea of "bundles of service" in the service eco-system approach; Buying a smart phone from a retailer is not only about the once-off transaction of property transfer from the retailer to the customer, but more so about a) a complex collection of relations influenced by several actors, b) technologies and c) resources.

A service ecosystem thus do not only involve general actors, but rather, according to Lusch and Spohrer (2012) also includes tangible and intangible components, which, Åkesson, Edvardsson and Tronvoll (2014) maintain to possibly be both enablers and inhibitors in the co-creation of value. Vargo and Lusch (2017) describe the source of value and the purpose of exchange in their original service-dominant thinking, as the activities derived from focused experiences and knowledge gained for the self and others, but also reciprocal experiences and knowledge from others for the self. Therefore, value is not created and later delivered by one actor in the service ecosystem, but in direct contrast, created through a process of value co-creation by multiple actors and tangible/intangible components. Karpen, Bove, Lukas and Zyphur (2015) summarize the S-D logic, as a service-based view of marketing, considering service as the underlying reason for exchanges, primarily enabled by operant resources such as knowledge and capabilities and actualized through the value co-creation process.

This relatively new logic is therefore based on the "value-in-use" concept, where exchange involves the exchange of capabilities of the human in the exchange process; where goods or products are simply the means of interactions (Shamim & Ghazali, 2014). These exchanges are central to a retailer's relationships with its customers and stakeholders, whereby each actor trades something of value with the potential of becoming at an advantage as a result (Hult, *et al.,* 2011). During the early years of the new millennium, Prahalad and Ramaswamy (2002, 2004) argued that, in retail, the customer is more than a mere co-producer of the core product or service offering that enables the delivery of experience, but rather a co-creator of experience or value. This resembles the key argument of S-D logic that "value-in-use" is constructed by a "collaborative process of co-creation between parties" (Vargo & Lusch, 2008:256). Implicit here, is the notion that the parties' interactions have an inherent propensity to beget value co-creation. Plé and Chumpitaz

Cáceres (2010) provide a turning argument in this seemingly "sanguine" outcome of value-related processes in S-D logic, by suggesting the pragmatic alternative of value co-destruction.

Showrooming behaviour: In-store value taking and online value co-creation/co-destruction
Multi-channel retailing therefore increases the complexity of viewing value, both from a retailer and from a customer perspective. Customers benefit from showrooming through their search activities across the multiple channels, in other words, the "value-in-use" concept of S-D logic. Likewise, retailers from which the final purchase transpire, gain from the co-creation between themselves and the purchasing customer, strengthened by the value that the customer has accumulated from the competing, showroomed retailer. This therefore leads to showrooming epitomizing a parallel form of in-store value taking and online value de-construction/co-creation. Daunt and Harris (2017) define in-store value taking as the "degree to which customers intentionally utilize multiple in-store personnel and other firm-provided resources, and thus co-destruct value in-store, to research a desired product without intending to purchase from that provider". Value co-destruction, for the purpose of this study, is based on Plé and Chumpitaz Cáceres' (2010) definition where value co-destruction, regarded as an interaction process between service systems (in the case of this study the showrooming) results in damaging at least one of the system's interests (in this case the brick-and-mortar store). More specifically, the degree to which customers use multiple retailer-provided resources for research purposes of the desired product in-store, not purchasing from that retailer (co-destruction), and then making the purchase from another on-line store (value co-creation).

Antecedents of showrooming behaviour
In studying "channel multiplicity" (Van Bruggen, *et al.,* 2010), and more specifically showrooming, or reverse ROPO – Research offline, purchase online (Kowalczuk, 2018) – authors such as Verhoef *et al.* (2007) argue that theoretical inquiry into the antecedents of showrooming is lacking. Since then, some authors have studied several possible antecedents which are presented in Table 1 below.

Table 1: Summarised literature on antecedents to consumers' showrooming behaviour

| Author(s) and year	Major findings
Sit, Hoang and Inversini (2018)	Identified eleven positive and negative *emotions* participants experienced during the showrooming process that affected showrooming behaviour.
Gensler *et al.* (2017)	Pricing is not the only determinant of showrooming. It is the *perceived gain in quality, in-store sales services assistance* and showroomers' *anticipated regrets* that motives showrooming behaviour.
Rejón-Guardia and Luna-Nevarez (2107)	Distinguished the *need for touch and a price difference online* as drivers of showrooming behaviour.
Daunt and Harris (2017)	Showrooming is a value creation process based on *product characteristics, consumer characters and channel characteristics* as antecedents of consumer showrooming.
Arora, Singha and Sahney (2017)	Claim that the perceived search benefits offline and perceived purchase benefits online *collectively* leads to showrooming.

Table 1 above offers insight into the incongruent study of the antecedents of showrooming behaviour up to date. Therefore, the presented research model in the next section addresses the product characteristic determinants for showrooming behaviour in South Africa.

3. Research Model

The proposed conceptual model is grounded in previous research on the antecedents of customer showrooming (Daunt & Harris, 2017). Showrooming is theorised, for the purpose of this paper, as two phases, namely in-store value taking and online value co-creation/co-destruction, as customers engage in differing degrees of value behaviours in both in-store and via online channels. As indicated in the introduction of this paper, the focus is only on the product characteristics as antecedents of showrooming, and not on the customer and channel characteristics also presented in Daunt and Harris' (2017) conceptual model. The research model for the purpose of this paper, therefore, hypothesises three product

characteristics as predictors of showrooming behaviour. These are labelled as 1) Technological speed of change, 2) Product acquisition value and 3) Product availability.

Figure 1: Product characteristics antecedents and consumer showrooming conceptual model.
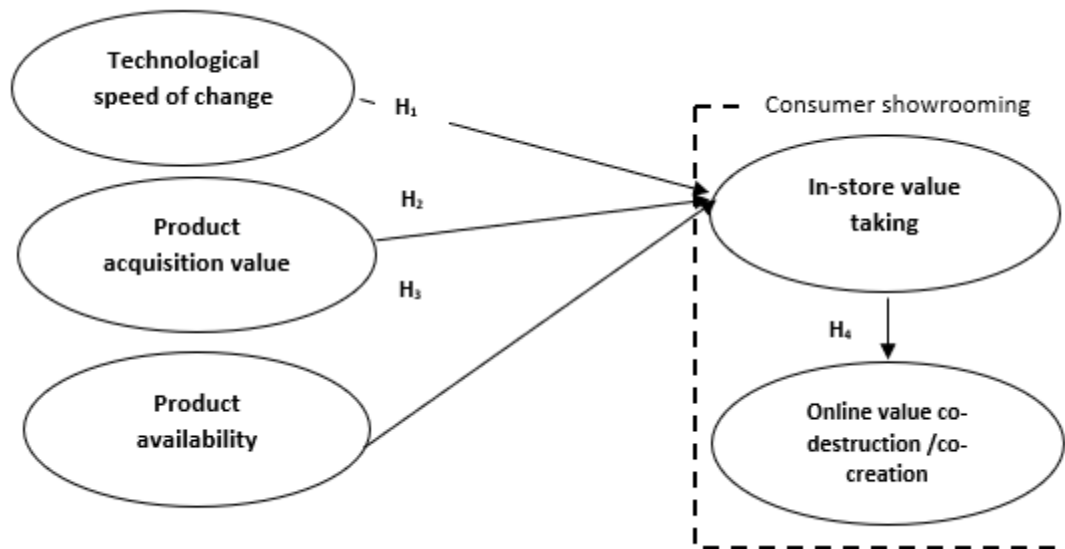
Technological speed of change
Daunt and Harris (2017) use the description of Jaworski and Kohli (1993) to refer to the technological speed of change as the degree of instability and adjustments in the product market. In the context of this study, technological speed of change related to products is also explained as products that are regularly modified and speedily released. The focus here is thus on regular innovations to meet customer needs. Van Baal and Dach (2005) suggest that products that are recurrently modified with new releases and modernized, are most likely involving extensive research activities. In this regard, Daunt and Harris (2017) argue that when the technological speed of change of a product is high, customers will engage extensively in store to reduce the perceived risk of such a 'new' product. Therefore;
H₁ The product's speed of technological change positively and significantly influences the South African consumers' in-store value taking.

Product acquisition value
Bhatt, Swaminathan and Suri (2017) explain product acquisition value as the gain (or loss) arising out of purchasing a product. Correspondingly, Grewal, Munger, Iyer and Levy (2003) argue that product acquisition value implies the symbolic perceived importance of the product to the customer. In the customers' pursuit to acquire the best product value, they are likely to switch between different stores and channels. This further contributes mostly to in-store value taking behaviour (Daunt & Harris, 2017). Accordingly;
H₂ The perceived product acquisition value positively and significantly influences the South African consumers' in-store value taking.

Product availability
Product availability has traditionally been regarded to improve customer involvement levels and subsequently, purchase intention (Bian & Moutinho, 2011). Product availability is defined according to the effortlessness with which customers can obtain and purchase a product (Balachander & Farquhar, 1994). Carlton and Chevalier (2001) suggest that limiting product availability might be a valuable means to manage the "showrooming problem". Daunt and Harris (2017) argue however, that the existence of multiple stock outlets that carry a specific product allow customers to participate in showrooming and then cause in-store value taking behaviour. Thus;
H₃ Product availability positively and significantly influences the South African consumers' in-store value taking.

In-store value taking and online value co-creation/co-destruction
The final hypothesis of this paper describes the composition of the relationship between the two variables that make up showrooming, namely in-store value taking and then online value co-creation/co-destruction. Multi-channel shopping and showrooming research (Chiou, Wu & Chou, 2012; Verhoef *et al.*, 2007; Gensler *et al.*, 2017; Arora & Sahney, 2017) suggest that the volume of search activity and advantages taken from in-store resources, relates positively to the intensity of online pre-purchase search activity. Therefore, Daunt and Harris (2017) conclude that customers take and co-create/co-destruct value from online and brick-and-mortar stores to their own maximized advantage. Therefore;
H_4 In-store value taking positively and significantly influences online co-destruction/co-creation among South African showroomers.

3. Methodology

To gain better insight on the showrooming behaviour of South African consumers, a quantitative research paradigm was used. This is based on Eriksson and Kovalainen's (2016) argument that quantitative designs are known to be used to quantify behaviours, opinions and attitudes. Approval from the University of Johannesburg ethics committee was obtained before the fieldwork commenced and the questionnaire was pre-tested on a sample of respondents. Convenience sampling was used to gather data from 225 respondents. Convenience sampling was used, based on its economic effectiveness and time advantages (Bradley, 2013). The target population included both males and females in South Africa who has purchased an item online in the past 6 months. A survey-based design was used based on the research model comprising hypothesis. A suitable sample of 225 respondents was recruited, comparable to the Daunt and Harris (2017) study who recruited 275 respondents.

The Daunt and Harris (2017) questionnaire was adopted for replication purposes in the South African emerging market context. The questionnaire commenced with a preamble, explaining the purpose of the study and ensuring the anonymity of participants. A screening question was included in the preamble of the questionnaire to obtain demographic information of the participants and to ensure that the participants have purchased an item from an online retailer within the past 6 months. The constructs for the study were tested on a seven-point Likert scale as per the Daunt and Harris (2017) study. The next section covered questions on the showrooming habits of the participants indicating their level of agreement or disagreement to statements on the following topics: In-store value taking, online co-creation/co-destruction, technological speed of change, perceived acquisition value, product availability, trust in in-store sales employees, perceived value of online shopping, trust in online stores, product involvement, internet savviness, shopping enjoyment and in-store shopping savviness. Section B consisted of 71 statements to measure the 13 constructs above. As mentioned in the introduction of this paper, this paper forms part of a larger study and therefore the questionnaire included additional items. This paper focuses on the product characteristics as antecedence to consumer showrooming behaviour. The variables for the purpose of this paper therefore included: In-store value taking, online co- creation/co-destruction, technological speed of change, perceived acquisition value and product availability.

4. Results and Findings

The quantitative data was analyzed using IBM SPSS 24.0. The internal consistency reliability of the scales to assess the hypotheses was evaluated by Cronbach's alpha coefficients for the scales. The validity of the scale was tested in the original study by Daunt and Harris (2017) and validity of the scales in a South African context was confirmed using a pilot study among the targeted respondents. Statistical techniques like frequencies, descriptive statistics and inferential statistics were also calculated. For this research to be effective, a confidence interval and significance level are used when testing hypothesis, with a 95% confidence interval and a 5% significance level. This section provides results on the demographic profile of the respondents, their showrooming behaviour as well as product characteristics as predictor of showrooming behaviour among South African consumers.

Reliability statistics

In order to increase the reliability of the scales during the statistical analysis, four items were removed, namely item 3 of technical speed of change; item 2 of in-store value taking; and items 4 and 5 of online value taking. Also, item 3 on the product availability scale was reversed scored, similar to the original Daunt and Harris (2017) study.

For the purpose of this study, internal consistency were computed by using Cronbach's alpha test and composite reliability test (CR). Table 2 below provides the Cronbach's alpha and composite reliability scores for the five constructs which received a measure larger than 0.7 (Spiliotopoulou, 2009). The third reliability test was the average variance extracted (AVE) (see Table 2). Overall, all average variance explained (AVE) were above 0.4, thus acceptable according to the literature (Fraering & Minor, 2006). Convergent validity was assessed by checking if individual item loadings for each corresponding research construct was above the recommended value of 0.5 (Aldalaigan & Buttle, 2002). Thus, based on the data in Table 2, all five constructs had loadings of more than the recommended 0.5, indicating acceptable convergent validity (Dunn, Seaker & Waller, 1994). These results provided evidence for acceptable levels of research scale reliability. This is supported by most of the inter-item correlation within the optimal range of 0.2 to 0.4 (Pallant, 2013:96). Additional two outlier cases were removed to improve the skewness of the results for regression analysis.

Table 2: Reliability

Scales	Factor loadings	N	AVE	CR	Cronbach Alpha α	Mean inter-item correlations
Technological speed of change						
There are often new versions of the product I purchased online.	0.820					
I can't predict how this product will develop in the future.	0.759	225	0.516	0.653	0.759	0.441
Products of this type change quickly.	0.780					
Products of this type change slowly.	0.490					
Product acquisition value						
I think that given this product's features, it is good value for money.	0.753					
The product meets both my quality and price requirements.	0.804	225	0.642	0.877	0.837	0.565
I value this product because it meets my needs for a reasonable price.	0.869					
This product is of considerable value to me.	0.774					
Product availability						
The product is commonly available.	0.741					
The product is easy to find.	0.788	225	0.472	0.779	0.709	0.391
Many stores sell this product.	0.585					
The product is not easy to find.	0.613					
In-store value taking						
Before buying online, I experienced the product in a number of different offline stores.	0.794					
I used offline stores to research all of the information that I needed about the product, before buying it online.	0.770	225	0.461	0.805	0.806	0.456
I compared the price of the product at a number of different offline stores before buying it online.	0.715					
I went to lots of different offline stores to find out about the product before buying it online.	0.613					

Scales	Factor loadings	N	AVE	CR	Cronbach Alpha α	Mean inter-item correlations
Before buying online, I only visited one offline store.	0.575					
Online value taking						
After looking in offline stores, I checked out the product on several online websites before I bought it.	0.770					
After looking in offline stores, I searched for more product information from different online stores before buying the product.	0.754	225	0.456	0.767	0.737	0.415
After comparing the price of the product at different offline stores, I compared the price at a number of offline stores before I bought it.	0.604					
After looking in offline stores, I bought the product from one of the first websites that I visited.	0.548					

Campbell and Fiske's multi-trait multi-method matrix assesses the construct validity of a set of measures in a study (Shen, 2017). This approach stresses the importance of using both discriminant and convergent validity. Having discussed convergent validity above and in Table 2, this section deals with discriminant validity, illustrated in Table 3 below. One of the methods to test discriminant validity of research constructs is the evaluation of whether the correlations among latent constructs are less than 1.0 (Nunnaly, 1978). The component correlation matrix depicted in Table 3 below shows the value for each construct was found to be greater than correlation values (Fornell and Larcker, 1981). As indicated in Table 3, the intercorrelation values for all paired latent variables are less than 1, indicating the existence of discriminant validity.

Table 3: Component Correlation Matrix of Showrooming behaviour (discriminant validity)

Technological speed of change	**0.718**				
Product acquisition value	0.046	**0.801**			
Product availability	0.193	0.287	**0.687**		
In-store value taking	0.108	0.308	0.321	**0.679**	
Online value taking	0.438	0.220	0.362	0.482	**0.675**

Respondents' demographic information
The demographic results showed that 53% of the respondents were female and most of the respondents between the ages of 20-30 years (56%). The education level of the respondents revealed that a significant part of the respondents have completed high school (29.3%) and a post school qualification – 36% holding a Diploma and 23.1% a University Degree. Employment statistics of the respondents indicated that 52.9% holds full-time employment with an organization.

Respondents' showrooming behaviour
The results of the participants' overall showrooming behaviour as influenced by the product characteristics is shown in Table 6 below. From the table most respondents agreed that they engaged in some form of showrooming behaviour as the mean values recorded were between 4 and 5. However, many disagreed with the statement that they purchased the product at the first website after visiting an offline store as this statement achieved a mean value of 2.92. There were no outliers in the standard deviation reported. The highest value recorded was 1.93 for the statement "This product is not easy to find".

Table 6: Descriptive statistics

Statements	Mean n=225	Standard Deviation
Technological speed of change		
There are often new versions of the product I purchased online.	4.80	1.641
I can't predict how this product will develop in the future.	4.77	1.494
Products of this type change quickly.	4.55	1.755
Products of this type change slowly.	3.36	1.695
Product acquisition value		
I think that given this product's features, it is good value for money.	5.62	1.205
The product meets both my quality and price requirements.	5.59	1.262
I value this product because it meets my needs for a reasonable price.	5.53	1.302
This product is of considerable value to me.	5.49	1.169
Product availability		
The product is commonly available.	5.13	1.642
The product is easy to find.	5.03	1.638
Many stores sell this product.	4.94	1.640
The product is not easy to find.	3.34	1.930
In-store value taking		
Before buying online, I experienced the product in a number of different offline stores.	4.75	1.816
I used offline stores to research all of the information that I needed about the product, before buying it online.	4.64	1.734
I compared the price of the product at a number of different offline stores before buying it online.	4.62	1.749
Statements	Mean n=225	Standard Deviation
I went to lots of different offline stores to find out about the product before buying it online.	4.48	1.755
Before buying online, I only visited one offline store.	3.35	1.926
Online value taking		
After looking in offline stores, I checked out the product on several online websites before I bought it.	4.99	1.614
After looking in offline stores, I searched for more product information from different online stores before buying the product.	4.91	1.629
After comparing the price of the product at different offline stores, I compared the price at a number of offline stores before I bought it.	4.84	1.724
After looking in offline stores, I bought the product from one of the first websites that I visited.	2.92	1.652

Hypotheses testing

To investigate the product characteristic as antecedents of in-store value taking and online value co-creation/co-destruction by South African showroomers, the product characteristics; technological speed of change, perceived acquisition value and product availability were considered independent variables while in-store value taking and online value co-creation/co-destruction were treated as dependent variables. Preliminary analysis was conducted to ensure that the assumptions of normality, linearity, multicollinearity and homoscedasticity were within acceptable parameters. The residual analysis of in-store value taking and online co-destruction/co-creation were not ideal, however the results links with theory and the results from the original study by Daunt and Harris (2017) as most respondents agreed that they visits store to gather information before purchasing online. The Pearson correlation coefficient indicated a moderate relationship for perceived acquisition value (0.308) and product availability (0.321) however, technological speed of change (0.108) reported a weak correlation. The total variance explained by the model for product

characteristics was 16%, instore value taking was 25% and F (3, 221) = 13.621, p < 0.005. The testing of the hypotheses reveals the following:

H₁ theorized that the speed of the product's technological change positively and significantly influences the South African consumers' in-store value taking and is rejected (std. B =0.067; p= 0.423).

H₂ suggested the product acquisition value positively and significantly influences the South African consumers' in-store value taking and is accepted (std. B = 0.311; p = 0.000).

H₃ indicated that product availability positively and significantly influences the South African consumers' in-store value taking and is accepted (std. B = 0.260; p = 0.000).

H₄ argued that in-store value taking positively and significantly influences the South African consumers' online co-destruction/co-creation and is accepted (std. B = 0.485; p = 0.000).

4. Discussion

This paper aimed to explore the product characteristics as antecedents to showrooming behaviour among South African showroomers. This study contributes empirically through the application of the Daunt and Harris (2017) model in an emerging market context and the investigation of showrooming behaviour focussing on product characteristics as antecedents to in-store value taking and online co-destruction/co-creation. Existing literature and research on consumer showrooming, service-dominant logic as well as in-store value-taking and online value co-creation/co-destruction, within the retail context were explored and synthesized to lead to four hypotheses of this paper.

The testing of the model in the South African emerging market context reveals that the product characteristic of speed of technological change as a strong driver of showrooming behaviour is not supported. This is in direct contrast to evidence of technological speed of change in showrooming of the developed market context of the Daunt and Harris (2017) study but is also supported by Van Baal and Dach's (2005) German study and Kucuk and Maddux's (2010) US study. However, the product acquisition value and product availability strongly predict showrooming behaviour among an emerging market, such as South African consumers. This aligns with the original findings by the Daunt and Harris (2017) study. It is therefore argued that this study supports that product characteristic as antecedents to showrooming behaviour, with the exception of speed of technological change, are a strong drivers of showrooming. The confirmation of hypotheses H₂ and H₃ underscore the type of products for which showrooming is most common. Contrary to the findings of Daunt and Harris (2107), the findings of this study show that showrooming is greater for products that are characterized by lower levels of technological speed of change, products that are perceived of high value and monetary worth and high availability. This builds on research by Sit *et al.* (2018), Gensler *et al.* (2017), Rejón-Guardia and Luna-Nevarez (2107) and Arora *et al.* (2017), which have explored additional antecedents of showrooming behaviour. Furthermore, this study finds strong relationship between in-store value taking and online value co-creation/co-destruction as the Hypotheses that in-store value taking is positively associated to online value taking and co-creation is strongly supported in an emerging market context. Therefore, from an emerging market customer perspective, showrooming occurs predominantly when the cost of acquiring the product is high and the product is highly available.

The research findings demonstrate that consumer showrooming in emerging markets cannot be treated as the same phenomenon as in developed markets. The relationship of product characteristics and antecedents to showrooming behaviour seems to differ among South African consumers and speed of technological change has a week relationship with showrooming behaviour. Financial cost and product availability remains a driver to showrooming behaviour as the emerging market consumer may be more motivated by these product characteristics. Therefore, online suppliers may need to focus less on technology advantages of their offerings to consumers in an emerging market such as South Africa and rather emphasise product availability and value for money (Child, Kilroy & Naylor, 2015). This study also supports the finding of Daunt and Harris (2017), as well as Ellway and Dean (2015) that co-destruction and co-creation may occur in a simultaneous, concurrent, and iterative manner.

The findings of these South African study further support findings from Child *et al.* (2015) that brick-and-mortar retailers' consumers are indeed partaking in showrooming behaviours and seamless integration of

online channels should be considered by retailers. Alternatively, the value-taking of showrooming may increase cost for the retailer's store options as consumers use the store services and personnel to gain information and test products to purchase the product online afterwards. Offering value to customers in store while competing on price and product assortment with an online store will continue to become more difficult as the emerging market consumer becomes more connected and internet savvy. Emerging market consumers are fast to adopt new technologies and seem to opt for cost saving which impacts their loyalty. Retail stores could exploit the available mobile technology by offering store applications that offer in-store promotions, encourage loyalty; provide additional information and product assortment. Using the findings of this study, practitioners should make sure they offer competitive pricing and the correct assortment in store to compete with online stores, this while developing their own online presence considering the needs of the emerging market consumer for product variety at competitive prices. Therefore, the main implication for retailers is the speed of adoption of showrooming behaviours by emerging market consumers which opens them up to additional competition and loosing revenue while cost increases.

5. Limitations and Future Research

The current study enhanced the understanding of showrooming behaviours among South African consumers form a consumer perceptive, however this is subject to several limitations that need to be recognised and which provide opportunities for future research. The study only focuses on some product characteristics as antecedents to showrooming and other characteristics, such as the touch-feel product characteristic was not included. The buying situation was not considered for example; routine purchases, first time purchase or repurchase of a specific item. Then, customer characteristics and channel characteristics used in the original study by Daunt and Harris (2017) were not reported on in this article. Furthermore, additional drivers of showrooming in emerging markets may be examined in a longitudinal study. Geographically, the study was conducted in Gauteng, South Africa, so findings cannot be generalised to the total population or other emerging markets. Further studies may be conducted nationwide and within additional markets. Future research may attempt to triangulate the emerging market consumer, store employee and broader organisational perspective to provide a more holistic assessment of underlying forces in showrooming.

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Paper 15

Namibian High School students' attitudes towards learning mathematics

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Abstract: Students' attitudes play a significant role in mathematics education. Attitudes determine one's behaviour, affect and beliefs, and even influence academic performance or an interest in a subject. To better understand Namibian students' attitudes towards mathematics, this study examines the types of attitudes (e.g., self-confidence, math anxiety, enjoyment, motivation and usefulness) that are significant to learning mathematics. The study's participants included 347 students (122 males and 225 females) from three high schools in the Omusati Region randomly selected. The students were from a varied social-economic and academic background and voluntarily agreed to participate in the survey. Quantitative and qualitative data were collected that included a Mathematics Attitude Questionnaire based on a five-point Likert scale adapted from research by Fennema and Sherman. The quantitative data were analyzed using Statistical Package for Social Sciences [SPSS], version 25.0, in which descriptive analysis was performed to calculate the mean [M] and standard deviation [SD]. The results revealed significant differences among the attitudes aspects of self-confidence, enjoyment, usefulness and motivation, while there was a low significant difference for the attitude aspects of anxiety. Additionally, there was a significant correlation between the attitude aspects of enjoyment and usefulness as related to the aspect of motivation. The results further found different qualitative reasons influenced the likes (e.g., career prospects) and dislikes (e.g., poor foundation) of mathematics (which is a focus of this paper) that were thematically analyzed using Walberg's theory. The dislikes suggested that a detailed programme could alter students' negative attitudes towards learning mathematics as well as teaching practices in general. However, because of limited space, this paper will only address findings from qualitative data.

Keywords*: Attitude aspects, affect, beliefs, mathematics, Namibian students.*

1. Introduction and Background

Like many other counties, mathematics is a compulsory subject in the K-12 Namibian school curriculum because of its everyday utility (Hamukwaya, 2019; Tjivikuua, 2000). The ability to apply mathematical concepts to real-world scenarios is the goal of learning mathematics in school. The knowledge of mathematics is an essential tool in society (Baroody, 1987). It is one of the most important subjects in a school curriculum because of its utility and relevance. Thus, all subjects have something to contribute to the promotion of mathematics, which is seen as the most intellectual subjects (Boaler, 2008). However, studies reveal that students do not perform to their expected level in mathematics (Mohamed & Waheed, 2011) and have different views in relation to mathematics as a subject. Some students think mathematics is just an academic activity that they must endure to get through school. Other students come to class with a negative bias towards mathematics. It is a teacher' job to help students to overcome biases that may become obstacles (social and academic) that prevent students' understanding and progress to have better academic outcomes in mathematics. Social obstacles are negative biases created by social pressure from peers and family, while academic obstacles include students' fears caused by past negative experiences.

Bekdemir (2010) held that many events persuade students to think negatively and helplessly towards mathematics. These include negative learning experiences that lower confidence and motivation, and lead to mathematics avoidance as well as failures that may be carried throughout schooling, and even to a future life. For example, if students had a history of failure in mathematics, they most likely would not want to continue studying mathematics, since they might think that they are not capable of learning mathematics. This attitude affects a student's views towards mathematics, and as a result, students might develop a negative attitude

towards the subject itself. For example, students have responded in this study with such statements as 'mathematics is difficult' or 'mathematics is for certain people'. Dossey, Mullis, Lindquist, and Chambers (1988) reported that students in the United States become less positive towards mathematics as they proceed through school, and that both confidence and enjoyment towards mathematics appear to drop as students move from elementary through secondary school. Similar results in a Tanzanian study by Mazana, Montero and Casmir (2019) found that attitudes became less positive among secondary school students compared to primary school students.

Studies have been conducted concerning students' attitudes in different countries, but nothing is known about Namibian students' attitudes, this is the first of its kind in Namibia. Therefore, to consider the influence of students' attitudes towards learning mathematics in a Namibian context, this study ventured into the Omusati Region. The region was selected based on the following:
- It is one of the northern Namibian region with high students' enrolment, majority are from low economic backgrounds.
- It was easy for the author to access the selected high schools.

The current study aims to identify a narrative that will describe the students' attitudes and increase awareness about the important of mathematics education in relation to those attitudes. Directing attention to the affective domain, like students' attitudes, is one effort to improve students' learning of mathematics. Researchers often use questionnaires to gather data about attitude towards mathematics (ATM). However, this kind of evaluation usually does not try to present a theoretical framework for the affective domain as do qualitative studies that offer a more detailed picture of students' affective attitudes towards mathematics. Thus, the framework of this study focuses not only on quantitative but also on qualitative analysis as well to contribute and build on ATM theories. As mentioned earlier, this paper will present only findings from qualitative data because of limited space. Specifically, the purpose of this present study is to investigate the following questions aligned to Namibian high school students' attitude aspects:
- What types of attitudes towards mathematics exist among Namibian high school students?
- What factors influence the likes and dislikes of mathematics?

2. Review of Literature

Students' attitudes

Attitude is part of affect, and it plays a significant role in a student's mathematical performance (McLeod, 1992). The right attitude and right perception enable students to use their abilities to gain maximum academic success. Attitudes towards learning are important in determining students' levels of performance and helping them to learn better and cooperate with the teacher. Thus, the role of attitude in achieving success in learning mathematics should not be underestimated. Furthermore, a student's attitude is related to a liking or disliking of mathematics and usually leads to a positive, negative, or neutral behaviour (McLeod, 1992). A positive attitude makes a difference between success and failure in the subject and can create interest among students in learning mathematics as a subject. Further, a positive attitude opens the mind to explore new opportunities to achieve success.

ATM has been a factor that is known to influence students' achievement in learning mathematics (Mohamed & Waheed, 2011) and can be developed from emotional responses, such as being curious, and bored (McLeod, 1992). Leder (1987) noted that ATM includes a variety of feelings. According to McLeod (1992), feelings and moods like anxiety, confidence, frustration, and satisfaction are responses to mathematical tasks that relate to students' attitudes. For example, if students become frustrated by poor performance, they may develop a negative attitude towards the subject. Similarly, if students find it is emotionally satisfying to work with friends on mathematical problems, they may develop a positive attitude toward small-group work. The sources of students' attitudes are repeated emotional reactions. For example, if a student has repeated negative experiences with algebra, the emotional impact will usually lessen in intensity over time. The second source of students' attitudes is an attitude from one pattern being attached to another pattern. To rephrase this, a student who has a negative attitude towards algebra may attach that same attitude to geometry.

Therefore, building on previous ideas about attitudes, in this paper student attitude refers to emotional responses that involve either positive or negative feelings.
Aspects of students' attitudes

Understanding students' attitudes towards learning mathematics needs a measurement of either (i) affect (confidence, anxiety and enjoyment), (ii) behaviour (motivation) or their (iii) cognition (usefulness). The focus of this study is Namibian high school students' ATM in relation to five aspects of attitude: students' self-confidence in learning mathematics, students' enjoyment, students' perceptions about the utility of mathematics (usefulness), students' mathematics anxiety and students' desire and interest to learn mathematics (motivation).
Affect

Students' self-confidence in learning mathematics: In this study, self-confidence denotes a student's self-assurance towards learning mathematics. Self-confidence correlates positively with achievement in mathematics, and these relationships have been found to be strong (Reyes, 1984). Kloosterman (1988) investigated the correlation between confidence and other affective variables like motivation and correlated the findings. If students felt confident doing mathematics and believed that mathematics is nothing more than doing exercises, then their beliefs about mathematics offered a different perspective regarding their confidence (McLeod, 1992).

Students' enjoyment towards learning mathematics: Enjoyment of mathematics is the extent to which students enjoy learning mathematics (Kupari & Nissinen, 2013). Students' enjoyment influences their behaviour and cognitive aspects (Syyeda, 2016). In fact, students will learn mathematics if they find it enjoyable and interesting (Organization for Economic Co-operation and Development, 2013). This seems that the more students enjoy doing mathematics the more they engage in learning mathematics and find the subject interesting, and this may result in a positive improvement in their performance (Mazana *et al.*, 2019).

Students' mathematics anxiety: Studies reveal that negative school experiences could be the reason for the sources of anxiety (Bekdemir, 2010). Similarly, Hembree (1990) confirmed that anxiety is related to students' poor performance. According to Kirkland (2016) mathematics anxiety is not just a dislike of mathematics but also about students' avoidance of learning mathematics. Students with mathematics anxiety feel helplessness, worry, panic, fear of failure and are not able to cope during mathematics lessons (Cemen, 1987). Hart (1989) described anxiety as a fear and a dislike or worry that results in students seeing mathematics as a worst subject among others. Additionally, research has indicated that students with a high level of mathematics anxiety lack confidence in their ability to learn mathematics (Brusal & Paznokas, 2006). Anxiety also is linked to an unwillingness to learn mathematics (Kirkland, 2016). This indicates that the construct has a major influence on the teaching and learning process and has severely impacted students' ability to enjoy doing mathematics, as it demotivates them considering mathematics in their career prospects (Ashcraft and Krause, 2007).

Behaviour

Students' desire and interest to learn mathematics (motivation): Norman (1981) suggested that motivation is a cognitive aspect. Just like other affect domains, motivation can also influence students' performance (McLeod, 1992). The level of motivation influences both attitude and achievement (Mazana *et al.*, 2019). Therefore, students are interested in studying mathematics if they have a desire to learn the subject (Organization for Economic Co-operation and Development, 2013).

Cognition
Students' insights about the usefulness of mathematics*:* How do students see the utility and relevance of mathematics? Usefulness refers to the importance of mathematics in an individual's daily life (Adelson & McCoach, 2011). If students are aware of the usefulness of mathematics, then it has an influence on their ATM. The importance and relevance of mathematics motivate students to have an interest in studying the subject (Syyeda, 2016).

3. Methodology

Research design
The structure of the Namibian basic education system consists of four main phases, namely, junior primary (ages 6-9 in pre-primary to Grade 3), senior primary (ages 10-13 in Grades 4 to 7), junior secondary (ages 14-15 in Grades 8 to 9), and senior secondary (age 16-18 in Grades 10 to 12). In Namibia, mathematics is one of the compulsory subjects in the primary through secondary levels in the 14 educational regions in the country. Three Namibian public high schools were selected randomly from the Omusati Region in the northern part of the country to form the study's sample group. These schools were situated in different semi-urban areas and served students from the tenth to twelfth grades. The average classroom enrolment was between 30 and 45 students. As mentioned earlier, the focus of this study was on high school students (grade ten, eleven and twelve) detailing their thoughts and feelings and responding to questions. However, the students in Grades 10 and 12 were excluded because during the time of data collection they were busy writing their final examinations. Thus, the research covered only one grade. Both qualitative and quantitative methods were used to collect data simultaneously, but data analyzed were done separately.
Procedures

First, a research clearance was obtained from the University of Turku Research Ethics Board. Second, permission was granted by the Namibian Ministry of Education, Art and Culture. Then, relevant authorities at regional and school levels in Omusati approved the study to be conducted at the selected schools. The purpose and the nature of the research study were presented to the mathematics teachers and the school principals, both in writing and verbally. The issue of voluntary participation and confidentiality was explained. Mathematics teachers at the selected schools helped in administering the survey which was completed anonymously. The names of the schools used in this paper are pseudonyms. Students at two of the schools (B and C) took about 40 minutes during one of their afternoon study-times to complete the survey. At school A, the content of the survey was regarded as part of the life skills subject, so students completed the survey during their 40-minute life skill period where the life skills teacher facilitated the process. Participants answered the survey questions individually without sharing ideas. A total of 1127 surveys were distributed to the schools, based on the eleventh-grade student enrolment. As a result, 352 students voluntary completed the survey; however, five of the returned surveys were excluded in the data analysis, as most of the important parts were left blank, such as gender, likes and dislikes. Therefore, this paper analyzed data from 347 surveys, which represents 136/266 students, 133/394 students and 161/467 students from schools A, B and C, respectively. However, there were a few surveys with one or two blank spaces. This indicated that not all 347 participants responded to all parts of the survey.
Sampling size

There were 347 eleventh-grade students (122 males and 225 females) between the ages of 15 and 20 years old who voluntarily took part in the survey. These students had diverse socio-economic and academic backgrounds in mathematics. At the time of the survey, the students were busy preparing for their end-of-year examinations. Due to the agreed research ethics between the author and the sample schools concerning confidentiality and anonymity issues, this study will not report any information about the students' performance on either the national or the local examination.
Research instrument

As stated earlier, the survey gathered both quantitative and qualitative data. The survey instrument was divided into three parts: Part A included students' background information (such as age and gender), Part B gathered qualitative data, covered reasons for likes or dislikes of mathematics and feelings about mathematics; which is the formation of attitudes. Furthermore, qualitative data can collect deeper information that enhances understanding of what is studied rather than simply collecting data and using only predetermined statements. Questions were asked in the following order (the third and the fifth questions asked students to complete statements): (1) Do you like mathematics? (2) If yes, why do you like mathematics? (3) I like mathematics, but… (4) If not, why do you not like mathematics? (5) When I study mathematics, I feel…

Part C – quantitative data used a five-point Likert scale and consisted of 58 statements divided into eight categories: confidence, enjoyment, anxiety, usefulness, gender, teacher, learning approaches and strategies. Students were required to choose among pre-determined Likert scale answers that reflected their individual views of the statements. The instrument was adapted from research by Fennema and Sherman (1976) and modified by the author. The dimensions of the five-point Likert scale anchored with statements ranging from: (1) strongly agree, (2) agree, (3) not sure, (4) disagree and (5) strongly disagree. In the present study, five attitude aspects were taken into consideration: student enjoyment in learning mathematics, student mathematics anxiety, student self-confidence in learning mathematics, student desire and interest to learn mathematics, and student perceptions about the utility and relevance of mathematics. However, because of limited space, this paper will only address findings from qualitative section that is data from Part B of the instrument.

To ensure validity in terms of wording purposes, the instrument was reviewed by experts in the field and was approved for this study by the University of Turku Ethics Board. The survey collected data to better understand Namibian high school students' attitudes and their perspectives in learning mathematics.
Qualitative data analysis. The qualitative data were thematically analyzed using Walberg's theory. Responses were based on students' learning experience in mathematics. Familiarization of the data were repeatedly done to understand students' views and to identify significant events or moments. Data were coded and storylines were constructed to compose narrative stories emergent from students' significant events. Results at each analysis phase was shared with a researcher in the field to enhance the quality and validity of the findings. Finally, data were arranged by emerged themes. The analysis process revealed nine themes of likes, seven themes students like but.., and six themes of dislike. The findings on students' feelings about studying mathematics were presented in two categories, positive and negative feelings. Three themes revealed positive feelings, while four themes had negative feelings. These findings are discussed with exemplary statements in the next 'Results' chapter.

The summary of the qualitative data analysis is discussed (in the 'Discussion' chapter) and is based on the theory of education productivity proposed by Walberg (1980), who described a model of productivity aimed to improve students' achievement through enhancing their performance to assist schools optimize their outcomes. According to Walberg, Fraser and Welch (1986) nine factors increase the affective, behavioural, and cognitive learning of students. Each of the nine factors is necessary for learning, and students won't learn much without at least a bit of each of the nine factors (Fraser, *et al.* 1987). These factors indirectly benefit student learning and increase students' learning abilities, motivation, and responsiveness to instruction (Fraser *et al.*, 1987). Since no factor can be sufficient in itself, student aptitude and instructional factors are seen as crucial for students learning (Waldrip and Giddings, 1994), as they influence learning either directly or indirectly. The proposed theory of education productivity includes the following:

Student aptitude: 1. Ability or prior achievement—students' early learning experience and positive results in previous examinations that support students learning of mathematics (Mazana *et al.*, 2019). 2. Learning development—students' stage of progress. 3. Motivation or self-concept—students' personalities and willingness towards learning mathematics; students' feeling of responsibility to undertake the mathematical tasks; finding mathematics interesting; and a positive feeling (Mazana *et al.*, 2019).
Instructional: 4. Quantity of instruction—the amount of time students engage in learning. 5. Quality of instruction—curricular aspects; understandable explanation to students; pace of instruction; and quality of content (Bruinsma & Jansen, 2007).
Educational stimulating environment: 6. Home environment—family support towards learning. 7. Classroom or school environment—conducive and supportive learning environment. 8. Peer group—support from friends. 9. Mass media environment—amount of leisure time; exposure to other relevant media resources (Bruinsma & Jansen, 2007).

4. Results

A total of 316 students shown that they like mathematics while 31 of the students indicated that they don't like mathematics.

Students' reasons for liking mathematics (Responses: 316)

Mathematics is an easy subject: Students mentioned that they like mathematics because they believed it was an easy subject. For instance, one student stated "*I do like mathematics...It is not difficult as you only need to familiarize yourself with the formulas.*" It seems that mathematics is an easy subject; therefore, it is the teacher's role to ensure that students understand mathematical formulas so they can find the subject easy to learn.

Mathematics is an enjoyable subject: Students said that they enjoy solving mathematical problems and, therefore, they said they like the subject. They said that mathematics is the only subject that helps them to overcome '*boredom*'. Students opined that they see mathematics "*like an endless game.*" Furthermore, students said that they enjoy mathematics because of the variety of methods to solve problems: "*There is always an easy way to do mathematics.*" This result illustrated that, if students enjoy doing mathematics, this attitude can create an interest and self-confidence towards the subject, increasing their engagement and consequently and improving their academic performance.

Career prospect: Students' said that mathematics was their favourite subject for their career prospects, for admission to a higher institution (like college and university) and for better opportunities in many job markets. Students see mathematics as a key to future work that will help them have a better life. For example, one student said, "*My dream career is [to be an] accountant which you cannot be without mathematics, so it's my best subject.*" The findings highlight how relevant and useful mathematics is in relation to students' career choices. This further illustrates that if students dislike mathematics they would not perform well and, as a result, they would not have a good career.

Mathematics' utility: Students believed mathematics helped them to solve mathematical problems in daily life. They mentioned that everywhere you go in the world, you could hardly avoid using mathematics: "*it is commonly used in the entire world almost by everyone...mathematics is required everywhere.*" Mathematics also provides the necessary skills to study other courses like engineering, accountant, and nursing, which require good passing marks in mathematics. This idea was echoed in a quote from one student: "*It's a unique subject and it's a key to most of the [other] courses.*" These findings revealed how relevant mathematics is in relation to individuals' lives and to others' field of studies, which meant some students recognized that mathematics is not an isolated discipline.

Good passing grades: Some students mentioned that they scored higher marks in mathematics compared to other subjects, as one student stated, "*Mathematics is my second lovely subject I like it ever since primary school I had been passed mathematics with good grades.*" This result pointed out the influence of students' prior achievement towards learning mathematics, and a good performance leads to positive attitudes towards mathematics. Therefore, teachers should be aware that negative performance might discourage students from learning mathematics.

Good teaching instruction: Students said that good teaching instruction helps them understand mathematics content. They said that when they were in a mathematics classroom that they felt good and enjoyed mathematics because of the teaching instructions. One student said: "*The teacher who is teaching us makes me understand because he is good at teaching mathematics*." Another student reported, "*I enjoy math he [teacher] ever explain well and I find it easy.*" These quotes reveal how effective and appropriate teaching instruction can influence students' attitudes. If teachers explain the content of their teaching well, they influence students' love and interest towards mathematics, and so students would like the subject.

Good relationship between a teacher and a student: A good relationship between a teacher and student appears to lead to a liking of mathematics. The following quote illustrates this finding: "*I always have a good relationship with my math teachers.*" This illustrates that teachers should have a good relationship with students, as it may lead students to like the subject.

Interest in mathematics: Other students said they liked mathematics because the subject was interesting. They mentioned that if you do not have an interest in mathematics, there is no way to pass mathematics. One student said, "*It's my best and [most] interesting subject than all the other subjects.*" If students have an interest in mathematics, then they will like it and build their confidence in the subject. Therefore, if teachers make mathematics interesting, it would have a positive impact on student learning.

Mathematics as a compulsory subject: Mathematics is one of the compulsory subjects in Namibian schools across all grades. Therefore, some students said that the only reason they like mathematics is that "*it is a compulsory subject for all students.*" This response suggests that mandating mathematics in the school

curriculum led them to like mathematics. This also suggests that if mathematics were not a compulsory subject in school, then some students might not like it or even dislike it.

Students like mathematics, but... (Responses: 285)

Having the fear of failing: Students said that sometimes mathematics caused stress, especially if they failed a test or examination. One student mentioned that the stress causes confusion: *"sometimes my mind goes blank and cannot think clearly...that I can even confuse and I become stressed because I don't like failing mathematics."* This quote shows how stress can negatively affect students' learning of mathematics, as it leads to fear of failing, which may cause poor performance. Thus, teachers should give all the necessary support to students so that they can perform better to avoid stress and failing in mathematics.

Mathematics is difficult: Some students said that they liked mathematics, but sometimes it was difficult and they struggled with it. They mentioned that mathematics needed attention, practice and revision time-to-time. However, some students reported that mathematics was only difficult when studying alone without any support. "*Sometimes I find it difficult and the possibility of getting a lower symbol will be there*", one student said. This illustrates the importance of studying in groups, whereby students help one another. The results also opined that for students to perform well, they need more practice and concentration. Therefore, teachers should ensure that students practice enough, and, if their performance improved, they might find the subject easy.

Insufficient teaching and learning instructions: The students said their teachers teach fast without considering if all students understood the lesson or not. The following quote supports the finding: *"I hate a teacher who teach faster because some of us will not understand well."* This suggests that teachers should consider that in classroom some students are slow to learn, and that teachers need to regulate their speed in teaching so that their instruction has not been a barrier to students' learning.

Imbalance in assessment tasks: Students also talked about the quantity and the level of the mathematical tasks that do not correspond with the level of tests and examinations. They mentioned that teachers gave easy and simple class activities but then asked difficult questions during tests and examinations, and the way questions were asked were sometimes "*complicated, confused and tricky*." This implies that teachers should balance the level of questions when designing class activities, tests or examinations.

Feelings of anxiety and shyness:. Other students said that they liked mathematics, but that it makes them feel uneasy and confused, especially when writing a test or examination. These feelings lead students to forget what they prepared for examination, *"I tend to forget easily which contributes to my failure as well."* The feeling of anxiety also makes students not feel comfortable to participate in the class. The following quote supports the finding: "*It makes me feel shy to speak out my answers simply thinking they are wrong and other learners will laugh at me.*" These results show that this feeling of uneasiness is an obstacle to student learning. Therefore, teachers should create a good learning environment where students feel open to participating in class activities. Teachers should also ensure that students learn to avoid the issue of forgetting what they learnt.

Difficulty learning some subject content: Students mentioned algebraic equations, money and finance (hire or purchase), a graph of function, numbers (inequalities), geometric shapes and angle properties as some of the most difficult areas to learn and hard to understand. A quote from one student supports the finding: *"When I simplifying and factorizing in algebra it make me feel uncomfortable... I hate it but I wish to improve on that."* Some students mentioned that they hated working with diagrams because 'sometimes they are confusing, *"like when finding a total surface area of a figure."* Despite that, students thought that these areas might be easy "*maybe I don't have ideas of working on them",* said one student. Thus, teachers should pay more attention to challenging subject areas so that students can understand them better.

Difficult to score high mark:. Some students believed they were not smart in mathematics because they did not get good marks. Interestingly, students said they hoped to do better and improve their performance. The following two quotes illustrate the finding: *"I had never got an A in mathematics sees grade 1 to grade 10, maybe I may get it at my final examination" and "It is not that easy to pass it with a B or A symbol. I used to get C and D symbols which I do not feel happy with these symbols."* As illustrated by the quotes, students are positive towards mathematics and had the courage to get high marks in the subject rather than being getting average marks. Therefore, teachers should offer necessary academic support to help students optimize their performance.

Students' reasons for dislike mathematics (Responses: 31)

Mathematics as a difficult and confusing subject:. Students mentioned that "*the formulas are too long and very confusing no matter how hard you try you still get low marks",* leading to feelings *"like giving up the subject".* However, some students voiced that they *"will try to make it."* This illustrates that teachers should use appropriate teaching strategies that can make the learning of mathematics easy, hence if students take it that the subject is difficult it also influence their relations with the subject.

Mathematics not a favourite subject:. Some students indicated that mathematics was not their favourite: *"I do like it….math is not my favourite subject."* This result revealed that students have preferences for particular subjects. Thus, if the subject is not one of the students' favourites, they will not like it. Consequently, they will have no interest in studying it, and this will affect their performance.

Negative early experience with mathematic:. Students said that poor performance from previous grades is another reason they disliked mathematics. However, students reported that low performance could be caused by not knowing how to study mathematics. One student said, "*It's always a subject that disappoint me…. I have the same symbol as from my previous grade and it's always U."* In spite of that, a majority of the students aimed for a higher mark, including the *"A symbol*." Some students thought that they were not gifted in mathematics and that this could be a reason for their poor performance since early grades. The following quote supports this finding: "*it does not make any improvement in my report; I am always failing mathematics even if I study it very hard… I think I am not good in math just from birth."* The study's results indicated that early performance had a major impact on students' learning. For example, frequently experiencing low performance in mathematics often negatively influences students' attitudes towards learning mathematics— and, as a result, they decide they dislike like the subject.

Insufficient teaching instruction:. Some students mentioned that teachers who taught too fast and did not explain the lesson in detail caused students to fail to learn much in the class: *"our teacher teach quick and do not explain well so that each and every one can understand."* The survey findings revealed that the pace of teaching often did not accommodate students with differing learning abilities. This implies that if teachers rush through their lessons, some students will not understand. This can affect their performance and result in their disliking the subject.

Student had no interest in studying mathematics: Other students mentioned that they had no interest in studying mathematics, since they could not see the utility of mathematics or its relevance in their life: "*it takes me nowhere. I do not like it",* said one student. It seems that if students knew the utility of mathematics in their lives, that knowledge might influence their interest. This conclusion suggests that students need to be taught the relevance of studying mathematics to develop an interest in the subject.

Feelings of math anxiety: Students reported feeling anxiety that makes them uneasy when studying mathematics and that they then lose interest in the subject. Some students mentioned that even if mathematics is not difficult, because of the anxiety they end up failing. *"Mathematics makes me uneasy, uncomfortable and make me confused even if the questions were easy, I usually fail",* said one student. This analysis indicates that math anxiety has a negative impact on student achievement; hence, even if the questions are easy, some students still fail. Thus, teachers should offer ongoing positive motivation and positive feedback, since it may help students to overcome mathematics anxiety.

Students feeling when studying mathematics

Positive feelings (Responses: 170)

Felt excitement and pride: Some students said they had feelings like *"comfortable," "good," "excited," "glad," "great," "proud," "very proud," "marvellous," "happy," "positive,"* and *"very thrilled"* when studying mathematics. They found mathematics enjoyable, useful, interesting and a favourite subject: *"Mathematics makes me feel special."* Students reported that mathematics was fun, especially when dealing with new concepts. One student said, *"I am proud of myself…I have the hope of becoming a genius or to lecture on one campus."* Students who felt they were a *'star-mathematician'* aimed to excel in mathematics*: "I am truly born for numbers."* These findings illustrate that positive feelings increase enjoyment and interest in the subject and will positively influence students' outcomes.

Felt comfortable when studying with peer:. Students said that they felt comfortable and good when studying with friends, sharing ideas with others and solve mathematics problems together rather than studying alone: "*Very proud because I usually study together with my friends and assist each other where one does not understand."* This suggests that if students felt positive when working with peers, then they would be motivated to do group work, and this could be a positive influence on their performance.

Felt good because of a teacher's encouragement: The motivation encouraged by mathematics teachers makes students feel good when studying mathematics: "*I feel happy because my teacher encouraged me to study more about math so that I can be able to solve math problems.*" This response suggests that if teachers motivate students to learn mathematics, students will also develop positive feelings towards the subject, which can influence their academic achievement.

Negative feelings (Responses: 22)

Felt anxious: Other students mentioned feeling anxious when studying mathematics, which reduced their interest in the subject. They expressed feelings of anxiety that resulted from viewing mathematics a difficult and challenging subject, since they sometimes did not understand what it was all about. Students said that they felt sleepy and confused in class and that in most cases they did not know what to write when solving mathematics problems. As a result, they got low marks and lost interest. "*I do not have an interest because I got symbol F,*" said one student. Another student said: "*I feel a sense of insecurity and I always feel that I cannot do it. I am always confused and always feel terrible.*" This implies that if students felt anxious when studying mathematics, it would lead to a loss of interest and subsequently affect their performance.

Felt worried about academic performance: Some students doubted their own performance, "*I don't know what makes me fail.*" Some said that they felt they were understanding everything, but when a test or examination comes, they could not manage to perform well. A typical quote from one student goes "*I always having that destination that I will pass but still my best symbol is always a D.*" While other students stated "*I get disappointed and discouraged...I am not getting answers. I sometimes feel like studying mathematics is a waste of time.*" This suggests that if students were performing well as they expected, they would not doubt their performance.

Felt uncomfortable because of poor performance: Some students felt they were forced to study mathematics: "*I feel like I am forced...I feel so uncomfortable...I do get stressed in math.*" Others felt bored, scared, angry or bad because math was difficult for them. They struggled to get the right answers and believed that they could not perform any better. A quote from one student illustrates this finding: "*I lose hope of studying as the result will just be 'U' symbol always.*" Students felt ignored and saw mathematics as a waste of time since they do not successfully learn it: "*I know I am still going to fail it anyway. I try to focus but I just do not get there*" and feel they get no support from teachers. This illustrates that if teachers do not support students with poor performances; these students may feel ignored and have a poor performance.

Felt panic: Other students reported that they panic when writing tests or examinations. As a result, they cannot remember formulas or the way to find the answer. Some students said that they do understand when a teacher is teaching but they panic when doing calculations on their own and, as a result, they get the wrong answers. These students think they are "*not good in math*" and "*math is not a good subject to study.*" These attitudes illustrate that if students panic when writing tests or examinations, this will have a strong negative impact on students' achievements as they fail to perform well. Thus, teachers should address the issue of panic through motivation and using effective teaching strategies to enhance students' learning.

Discussion

Reasons why students like mathematics

Many of the students reported that they liked mathematics (316 of the participants in this study). The survey results revealed that students found the subject of mathematics easy to study, enjoyable and fun. Furthermore, many of the students said that they felt happy and proud when studying mathematics because the subject was relevant in everyone's life, and they therefore felt comfortable with it. Furthermore, the relevance of mathematics motivate students to have an interest in studying the subject (Syyeda, 2016). Other studies have also found students usually have a desire to study a subject if they have an interest in it (Organization for Economic Co-operation and Development, 2013). These findings suggest that students' enjoyment influences their behaviour (Syyeda, 2016), meaning that students learn better if they find the subject enjoyable (Organization for Economic Co-operation and Development, 2013). Accordingly, the more that students are engaged in learning mathematics, the better their learning performance will be (Mazana *et al.*, 2019). This suggests that enjoyment increases engagement and deepens students' understanding.

The results also indicated that mathematics was a favourite subject for some students because it was needed for their career prospects, getting admitted to tertiary institutions or finding a better job opportunity that required good marks in mathematics. The results also indicated that good passing records of mathematics in

previous classes or grades, compared to other subjects, leads students to prefer and have an interest in mathematics. Furthermore, this study's findings revealed that mathematics provided the necessary skills to study other courses. For this reason, good performances influence positive attitudes, which in turn influence students to learn better. As a result, students' achievements will be positive and high. This study's results suggested that successful instruction by a teacher influences student learning and increases their understanding. Effective mathematics teaching helps students to understand and master a subject, a conclusion that is similar to findings by Ndlovu and Ngcobo (2018). If students are happy with their teacher's instructions, this has an impact on the relationship between teachers and students. Thus, the results of this study illustrate that some students like mathematics because of a positive relationship and, in this way, mathematics will be a subject of interest. Consequently, many of the students surveyed show a willingness to learn mathematics and solve mathematical problems.

On the other hand, the results indicated that some students like mathematics, but some factors had a negative influence on their liking. For example, the majority mentioned "*fear of failing"* and "*insufficient instructions."* This means that if their teachers rush their teaching without considering students who do not understand, it may lead those students to failure. Fear of failure generally leads to poor academic performance and anxiety. Further, fear interferes with academic performance, as anxiety develops a negative association towards academic performance in mathematics. In addition, fear of failure hinders and becomes an obstacle to students' learning (Jones, Wilson and Bhojwani, 1997). This leads students to develop negative expectations towards mathematics and eventually view mathematics as a bad subject (Bekdemir, 2010).

This study's results revealed that mathematics is a difficult and confusing subject for some students who believe that mathematics needs time for practice. However, results indicated that mathematics might not be difficult, but perhaps some students do not know how to solve problems mathematically. The study further indicated that teachers often gave simple class activities but asked difficult questions in tests and examinations. This suggests that mathematics teachers should use effective strategies and balance the levels of questioning to make the subject interesting and easy for students to improve their performance.

The study further found that some students felt uneasy and confused, especially when writing tests and examinations. The reason for the confusion found in the study was that students easily forgot what they studied for a test or examination, which affected their performance. Students believed that they were not smart in mathematics. However, if students received effective teaching, and if teachers approached students with understanding, then the students would not forget what they had learnt. Interestingly, the study revealed that students want to excel in mathematics. Importantly, students also believe that they can only improve their performance if teachers support them. In summary, students were willing to learn mathematics, particularly if they received support.

Reasons why students dislike mathematics
The study found that only 31 of the participants reported that they did not like mathematics. Although this is a lower percentage of students when compared to those who like mathematics, the students' reasons for disliking mathematics are touching and need to be considered by mathematics teachers to enable better achievement. An interesting finding from the study is that even though students dislike mathematics, some of them had the courage to try their best to improve their performance. The study concluded that the following beliefs hinder students' ability to like mathematics:

- *The subject itself is difficult* and includes long formulas that confuse students.
- *Mathematics is an innate gift that not all students have*. This belief often developed when a student had a history of failure in school, leading to a student believing that he or she is incapable of doing mathematics. As a result, this student's belief led to low confidence and low motivation as well as mathematics avoidance and eventually to failure. It might be difficult for teachers to change students' perceptions since they may have developed these negative biases as early as primary school. Thus, there needs to be a strong reason to abandon existing negative beliefs (e.g., Barbara, 2002).
- *Mathematics is not a favourite subject*. Students' preferences are often aligned with interest and their future career path. However, it is a teacher's role to develop love and interest for and a positive awareness in learning for mathematics among their students.

- *Negative early experiences in learning mathematics* include poor or low performance that disappoint students who do not achieve high marks. Poor performance encourages a negative attitude towards the subject. Experiences or memories, as described by Hannula (2002), were found to have negative influences on the process of a student learning mathematics. According to Schommer-Aikins (2002), these early experiences are fundamental in shaping students' beliefs. This suggests that teachers should ensure that students perform well at early grades to influence higher performance at high school.
- *Insufficient teaching instruction*. Teachers who teach quickly and do not explain their lessons in detail lead to some students feel ignored by their teachers. This implies that a quick pace of teaching does not support a mixed ability learning environment, and the slow students will be disadvantaged. This situation can lead to student frustration, as the speed of teaching becomes academic obstacles to students' learning.
- *No interest in studying mathematics*. Students cannot see the relevance of mathematics to their lives or in their future careers. According to a study conducted among Namibian mathematics teachers, if students lose interest, teachers should motivate them with positive feedback so they would recognize the usefulness of mathematics (Hamukwaya, 2019).
- *The feeling of anxiety*. Students worry and feel anxious, believing they will just fail at the end. Bekdemir (2010) stated that anxiety results from negative school experiences; and leads to poor performance (Hembree, 1990). This suggests that if students do not experience failure, they may perform better, and math anxiety would not be an obstacle to their learning progress. Thus, teachers need to reduce anxiety among students by ensuring that students perform well in the early grades, and by doing so will help students to learn mathematics without hindrance.

Students feeling towards learning mathematics
Based on this study's results, students had both positive and negative feelings towards the learning of mathematics. The study revealed that the majority of the students had positive feelings towards mathematics who believed that the subject only required understanding. The positive attitudes included feeling proud, excited, great, comfortable, and happy. For example, they felt good because of the motivation they received from their teachers, and felt happy when studying mathematics and were successful in learning the subject. McLeod's (1992) study supports that motivation influences students' attitudes and enhances their performance. Students in that study also felt good when scoring high marks and felt comfortable when studying in groups rather than alone. McLeod's results further illustrated that mathematics was enjoyable, useful and a favourite subject for many of the students.

Students felt uncomfortable, worried, ignored, and bored similar findings in studies by Cemen (1987) and Hart (1989). Students in this study felt forced to study mathematics as they often struggled to get the right answers. They concluded that they could not perform any better, and this demotivated them to have an interest in the subject or consider it in making a career choice (Ashcraft & Krause, 2007). Students in this current study illustrated low participation, and revealed a lack of interest in mathematics, leading students to feel sleepy and confused when solving mathematical problems. The students reported that they often get panicked when writing tests and examinations similar to findings by (Cemen, 1987), as students cannot remember formulas and cannot find the correct answers. According to Brusal and Paznokas (2006), these feelings resulted from mathematics anxiety that led to low confidence in learning mathematics. Additionally, the present study detailed that students worried and doubted about their academic achievement because of their low performance, and therefore felt the study of mathematics was a waste of time. Therefore, mathematics teachers need to understand how to change a student's negative track record and to help struggling students overcome their mathematical hurdles.

Discussion of the analytical approach in relation to education productivity—Walberg theory
The findings of the present study did not reflect any factors related to students' learning development, school environment or mass of the education relating to productivity theory (see Table 1). Despite the fact that some education productivity factors were not reflected in this study, the findings of this study is significant as students illustrated factors that are crucial for students learning ability, aptitude and instructional variables

cited by Waldrip and Giddings (1994). However, Fraser, Walberg, Welch & Hattie (1987) held that at least a small amount of each factor is needed to affect student learning.

Table 1: Overall discussion of the likes and dislikes based on the Walberg Theory of education productivity

Walberg theory	Findings from the data
Students aptitude variables: Ability (prior achievement in mathematics)	<u>Likes:</u> Good passing grades, and not happy getting low marks <u>Dislikes:</u> Fear of failing and disappointing or low performance
Students aptitude variables: Motivation (students' willingness to study mathematics)	<u>Likes:</u> Mathematics an easy, fun and enjoyable subject only requiring understanding; students feel happy, proud and comfortable; and mathematics is a subject of interest and a favourite subject. <u>Dislikes:</u> Mathematics is difficult, confusing, and it needs time; feel it is an innate gift; not a favourite subject thus no interest in studying; and feel like giving up because it is not easy to score good marks.
Instructional variables: Quantity of instructions (engagement time)	<u>Dislikes:</u> Parts of the content are hard and difficult; and formulas are too long and confusing
Instructional variables: Quality of instructions (curricular aspects)	<u>Likes:</u> Good teaching instructions with clear explanations. Dislikes: Insufficient teaching instruction; teachers teach quickly; teachers give simple tasks but ask difficult questions in tests or examinations; and students feel ignored by teachers. <u>Dislikes:</u> Lack of support from teachers.
Educational stimulating environment: Classroom environment (conducive learning setting)	<u>Likes:</u> Good relationship between teachers and students <u>Dislikes:</u> Student feels uneasy and too shy to participate in class; feel uncomfortable to ask if do not understand
Educational stimulating environment: Peer group (support from others)	<u>Likes:</u> Feel proud when sharing ideas with friends/peers <u>Dislikes:</u> Feels too uncomfortable to participate.

5. Conclusion and Possible Future Direction

The most important finding of this study was that only a few of the participants (31) reported a dislike of mathematics or had negative feelings towards the subject. Those who liked mathematics mentioned that they enjoyed the subject more than others and aimed for higher marks, which could grant them chances for admission to higher institutions. Interestingly, most of the students who disliked mathematics had the courage to improve their performance. Though some mentioned such hurdles as insufficient teaching instruction, mathematics as an innate gift and math as a difficult subject among others as reasons that make them dislike the subject. The results reflect that negative attitudes affect students' academic performance as some students indicated negative responses such as they did not have an interest in the subject and could not see the utility of studying mathematics in school. These obstacles are harder to overcome since they may have resulted from repeated prior negative experiences. Therefore, it is necessary for teachers to solve mathematics problems successfully using various ways of solving problems and attempt to change students' negative track records as every student learns mathematics in a different way. Based on the findings, there is a need to address how students that do not like mathematics can be assisted in grade eleven to improve their mathematics results? To sum up, it will be beneficial to explore how students from other grades feel about mathematics. For future research opportunities, a longitudinal study is needed to investigate students' ATM

across different grade levels as they progress from grade ten to twelve or either primary to high school across the country. This study was as it only focused on only one grade.

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Paper 16

Dynamics of coopetitive interactions in the tourism industry: the case of SMEs in Luderitz

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Abstract: Studies on coopetition have gained research interest over the last three decades. Coopetition refers to a complex structure of firms' interdependence where cooperation and competition are simultaneously present and intertwined, also defined as simultaneous pursuit of cooperation and competition between firms. The tourism industry consists of diversified categories of SMEs that operate in close proximity and are inter-dependent due to limited resources; competing and cooperating becomes ineludible. This paradox has led researchers to explore the drivers or motivations, as well as outcomes of coopetition. Drivers are classified under external drivers relating to industry factors, relation-specific and internal drivers. There are inevitable tensions generated by the coopetition phenomena. Paradoxes emerging from inter-organizational relationships surface from competing goals and demands, hence the tension. This paper determined drivers and outcomes of coopetition at the inter-organizational level among small and medium enterprises (SMEs) in the tourism industry at Lüderitz through in-depth interviews and ethnographic methodology. External drivers such as geographic proximity, customer preferences or needs and credibility, and, relation-specific drivers such as location, trust and commitment were the dominant determinants of coopetition. The outcomes of coopetition include customer satisfaction, enhanced destination image, cost saving, information sharing, enhanced innovation, access to required resources and firm growth. A main challenge uncovered is the lack of joint marketing of Lüderitz as a destination which impede the long-term competitiveness and success of the destination. There is a dominant cooperative culture of coopetitive relationships which alludes to coopetition capability of businesses to maintain moderate levels of tension for best alliance performance.

Keywords: *Competition, Cooperation, Coopetition, Lüderitz, SMEs, Tourism*

1. Introduction

Tourism plays a significant role in the economies of many countries, including Namibia. It is the third largest contributor to the country's Gross Domestic Product (GDP). Kavita & Saarinen (2016) allude to the importance of the tourism sector for governments and regions in view of its socio-economic development and employment creation potential, having evolved to create direct and indirect income in the Global South. Tourism performance in Namibia has been positive with a direct contribution of N$ 5.2 billion to the GDP (equivalent to 3.5% of overall GDP) and more than 44 700 jobs in 2015. In the broader economy, the travel and tourism industry contribution in the same year was N$15.1 billion (representing 10.2% of overall GDP) and 100,700 jobs (14.5% of total employment). Approximately 31% of growth in GDP contribution and 49% of increase in jobs were recorded since 2011 and 2012, respectively (Namibia Tourism Satellite Account (TSA) 2013, 2015). In 2017, Namibia recorded total foreign arrivals of 1,608,018 of which 1,499,442 were tourist arrivals, which is equivalent to 93.2% of total arrivals. The tourism sector continues to experience growth and the prediction is that foreign tourist arrivals will be 1,724,000 in 2020 (TSA, 2015).

Tourism in Lüderitz
Lüderitz is one of Namibia's truly unique destinations, situated on a rocky shore bordering a harsh desert environment. Lüderitz has population of approximately 13 000 inhabitants (Namibia Statistics Agency, 2011) and is especially famous for its delicious fresh seafood, including crayfish, oysters, abalone and fish, all celebrated at the annual Lüderitz Crayfish Festival. Other attractions of the town include: the Shark Island, a reminder of the town's history and home to noteworthy legends namely Captain Cornelius Fredericks and

Adolf Lüderitz; Kolmanskop, Namibia's most famous ghost town located about 10 km inland from Lüderitz; the unspoilt natural environment that is home to a herd of mysterious desert horses; Diaz Point known for its historical appeal and magnificent coastlines; 4x4 Camping Tours; Boat Trips around Lüderitz Bay and the outlying islands; Wind, kite surfing and speed sailing; wildlife, including the rare Brown Hyenas, African penguins, Damara tern, Cape fur seal, Heaviside and bottlenose dolphins (van Schalkwyk, 2015). The Waterfront developments and the establishment of a Maritime Museum are additional drawing cards and offer opportunities to engage in the area's history from a modern setting Lüderitz economy depends on the fishing, mining and tourism industries. The fishing industry provides more than 80% of employment. Mining under Namdeb Holdings at Elizabeth Bay Mine 30km from Lüderitz along the southwestern coast is seeking a buyer for its Elizabeth Bay mine to secure its long-term future ("Lüderitz Town Council," n.d.).

Tourism in Lüderitz has experienced growth over the past decades and is attested to the expansion of the waterfront, the passenger liners, the international speed-week event and crayfish festival. There are approximately 40 accommodation establishments in Lüderitz, ranging from hotels, guesthouses/ self-catering establishments, bed & breakfast, backpackers, dormitories and camping. The accommodation options provide for every taste and budget (U. Grünewald, personal communication, May 22, 2019). Other direct tourist services offered include restaurants, coffee shops, tourist information centre, boat trips and tour guides (van Schalkwyk, 2015). Lüderitz destination has a critical disadvantage of distance from the capital city Windhoek as well as location that makes it difficult to attract tourists traveling Southern Africa by road.

Study Context
Tourism is a difficult concept to foster and define because there are many components that make up tourism (Kylanen & Mariani, 2012), from the intangibles such as the experience that a tourist has which can be classified as a psychological factor, as well as the services and entertainment that are offered; to tangibles like accommodation, transport and consumables. There could be two ways of arriving at a definition where demand and supply are the respective points of departure (von Friedrichs Grängsjö, 2001).

Many tourist destinations are composed of a few large and many small businesses and due to the constraints in resources, a single small business is unable to manage providing a complete tourist package (Kylanen & Mariani, 2012). Particularly in contexts of geographically and population small destinations, tourist establishments are few which in turn reflects on tourist packages offered. Consequently, the focus of individual Small and Medium Enterprises' (SME) marketing strategy is forced to change from product marketing to destination marketing. Marketing a destination is to 'market the area as a single, unified tourist product' (von Friedrichs Grängsjö, 2003) i.e. the combination of all the related products in an area. In the destination, all actors have to work together closely on creating an attractive tourism package. This means that all actors, even those that compete for the same customers, need to cooperate with one another at the same time as they compete in order to create value for the destination, which will in turn benefit individual businesses. The main challenge at a destination is to achieve cooperation among entrepreneurs that prefer to be independent, having a sense of control and being competitive (von Friedrichs Grängsjö, 2003). Such independence in a way prevents the cooperative relations to develop among these SMEs. This is understandable because these two relationships, competition and cooperation, generate opposite emotional reactions (Bengtsson & Raza-Ullah, 2016).

Both competition and cooperation are important because they drive development from different perspectives. Competition generates pressure for organizations to develop advanced products or services, while cooperation drives development by the demand of resources and mutual interest (Bengtsson & Kock, 2000). This kind of relation among competitors is encompassed in the concept of 'Coopetition', i.e. how firms can cooperate in certain activities and simultaneously compete in others in order to reap the benefits of knowledge sharing, increased innovative capacity and cost reduction advantages (Bengtsson & Raza-Ullah, 2016). These relationships are particularly important in the tourist industry because the proximity of firms and inter-dependence for scarce resources create innovative and profitable tourist packages.

Small and medium enterprises (SMEs) in the tourism sector are characterized by repetitive coopetitive relationships because of proximity (Della Corte & Aria, 2016) and inter-dependencies (Chou & Zolkiewski,

2018). With most tourist establishments being situated in geographically close-range destinations implies scarce resources that are competed for to deliver services to tourists. Furthermore, the SMEs are almost *obliged* to constantly interact with other firms as they are neither self-contained nor self-sufficient in resources for innovation (Bouncken, *et al.*, 2015) and knowledge (Ritala & Hurmelinna-Laukkanen, 2009). They create business networks within the same sector to generate economies of scale, risk management and leverage resources (Della Corte & Aria, 2016) to overcome common limitations for competitive advantage.

SME's are predominantly involved in arms-length relationships with their competitors due to the fierce competition and their struggle for survival and growth. Even though the rationale behind this competitive interaction is justifiable, today, there is an increasing need for firms to be engaged in more cooperative relationships in order to pool resources for mutual benefits. This paper aims to therefore determine the drivers and outcomes of competition and cooperation at the inter-organizational macro-level, among small and medium enterprises (SMEs) in the tourism industry at Lüderitz. It further explores the tension and subsequent emotions that emerge through the interaction among firms.

2. Literature Review

Coopetition, a type of inter-firm relationship, has become a notable area and new paradigm of research (Bengtsson, Eriksson & Wincent, 2010) in management literature. Coopetition involves forming relationships between two or more actors involved in cooperative and competitive interactions (Bengtsson & Kock, 2014) in different contexts and at multiple levels of firm, dyadic, triadic, inter-firm and network (Bengtsson & Raza-Ullah, 2016). Defined as the simultaneous and paradoxical engagement (Chou & Zolkiewski, 2018), a portmanteau (Raza-Ullah, *et al.* 2014) in which cooperation occurs between competitors (Bengtsson & Kock, 2000), coopetition, the solidification of cooperation opportunity (Donato *et al.*, 2015) has become an essential part of many companies' agenda (Bengtsson & Kock, 2014). It is a novel arrangement of interfirm dynamics for competitive advantage (Chou & Zolkiewski, 2018) where over 50% of collaborative relations is among competitors within the same industry (Gnyawali & Park, 2011). This is a shift from the dialectic of sole focus on internal resources signifying business activities within the boundaries of a single firm, to a new dialectic of assimilating external resources through networking, which suggests an interaction across organizational boundaries (Bengtsson & Kock, 2014; Gnyawali, *et al.*, 2016).

Competition and cooperation
Traditional theories and conventional strategic approaches (Robert, *et al.,* 2009) focus on the two extremes of inter-organizational relationships, competition and cooperation. On the one end of the continuum, competition can be unconditional with the objective of generating high returns and becoming market leader. Cooperation on the other end, through strategic links such as alliances seeks to maintain or strengthen the competitive position (Robert, *et al.,* 2009). Bengtsson & Kock (2000) mention that 'competition is described as the direct rivalry that develops between firms due to the dependency that structural conditions within the industry give rise to'. The fact that competitors are in an industry exposes them to competitive relations whether they like it or not (Easton, 1990). It means that in a specific industry, players perceive each other as rivals because of the sharing of resources and markets. Consequently, self-interest drives actors to realize and maximize their own benefits (Bengtsson & Kock, 2001).

While, competition is considered a driving force for industrial development through stimulating innovation and upgrading competitive advantages to ensure highly satisfied customers (Bengtsson & Powell, 2004); cooperation is a totally different concept from competition. This type of relationship is built on the mutual interests of both organizations (Chien & Peng, 2005). Cooperators tend to have more positive relationships with each other (Schutte, *et al.*, 2001), sharing resources and working collectively across organizational boundaries towards achieving mutual goals. In pure cooperation knowledge and information flows more freely and the actors share rights (Oliver, 2004). Compared to competition, cooperation is a visible and formal relationship because actors share mutual interests, resources and prefer frequent interactions with each other, a benefit that enable firms to complement each other by reducing costs and risks (Bengtsson & Kock, 2000). Setting boundaries is the core feature of the definition of competition (Bengtsson & Powell, 2004). It signifies the thrive for independence to protect competitors' competences and knowledge (Oliver, 2004) in

order to achieve individual goals and outplay other competitors. According to Brandenburger, Nalebuff & Maulana (1996), the business world is viewed in warlike terms that even when players are both competitors and complementors, they tend to see one another as only competitors and fight against each other.

The intensity of competition relates to proximity among competitors and the degree of dependence between competitors. The proximity among competitors enables competitors to be aware of the others' actions. Through being close to each other, the competitors respond more quickly to the actions of each other (Bengtsson & Kock, 2000). Regarding the degree of dependence, competitors that are mutually dependent (Chou & Zolkiewski, 2018) on each other tend to avoid rivalry. Therefore, we assume that those that are less dependent on each other compete more intensively. Previous studies are more focus on the two extremes of relationship, competition and cooperation. However, success in today's business world requires companies to embrace and balance the two types of the relationships (Chien & Peng, 2005), which is known as coopetition. Particularly, for new competitors, cooperation is beneficial for gaining technology and market shares (Hamel, Doz & Prahalad, 1989).

Coopetition
Coopetition refers to a 'complex structure of firms' interdependence where cooperation and competition are simultaneously present and intertwined' (Dagnino & Padula, 2002), also defined as simultaneous pursuit of cooperation and competition between firms (Bengtsson & Kock, 2000). Essentially, it is a novel strategy that spans beyond traditional business models of competition and cooperation (Kylanen & Mariani, 2012). Clearly, coopetition is a relationship composed of competition and cooperation between the same actors. It is easy to understand the traditional view that there are different relationships with different actors, such as cooperation with suppliers and competition with competitors (Bengtsson & Kock, 2000). In this view, the two contrasting phenomena were clearly separated, depending on actors whereby certain actors are seen strictly as competitors or strictly as cooperators. Oliver (2004), however, takes a step away from this view toward the duality of coopetition by raising a theory of exploration-exploitation lifecycle. She argues that companies pursue innovation in the stage of exploration therefore the relationship is collaboration-dominated; while in the stage of exploitation, companies tend to capture value from knowledge, as a result, they avoid collaboration and competition becomes the dominating relationship. This suggests a situation where competition and cooperation occur in a sequence, whereby the two phenomena neither take place separately nor simultaneously. The concept of coopetition differs because the relationship is according to the activities rather than the roles of different actors such as suppliers, competitors, etc.

Bengtsson & Kock (2000) argue that in coopetition competitors cooperate with activities far from the customer and compete in activities close to customer. Generally, in areas far from customers such as R&D and production, competitors have mutual interests in product development. Therefore, they prefer to cooperate with each other in order to accelerate innovation and reduce R&D costs. In the activities close to customers such as marketing and sales, competitors compete to capture bigger market segments. The synthesis of competition and cooperation will foster knowledge and technological development and market growth rather than when competition and cooperation are implemented separately (Garcia & Velasco, 2002), which enable companies to take advantage of 'win-win' situations (Quint, 1997). Coopetition definition differs depending on the level at which coopetition occurs because these levels are distinct from each other (Bengtsson & Raza-Ullah, 2016). Two schools of thought aid the varied conceptualization of coopetition, namely, the Actor School of Thought and the Activity School of Thought. Crafted by Brandenburger, *et al.* (1996), the Actor School of Thought presents the "value net", which is a symbolic map representing customers, suppliers, competitors and complementors as actors and how they interact interdependently. This School advocates the division of coopetition where competition occurs with some actors and cooperation with other actors (Bengtsson, *et al.,* 2010). Fundamentally, the actors collaborate to bake a bigger cake, an activity that is usually far from the customer in order to create a "critical mass", and then compete to take the largest share of the cake (Vapola, *et al.,* 2008; Brandenburger, *et al.,* 1996).

The Activity School of Thought (Bengtsson & Kock, 2000) undertakes the view that cooperative and competitive parts of coopetition are divided between activities where firms compete in some activities but cooperate in other activities (Bengtsson, Eriksson & Wincent, 2010). Coopetition focus is on dyadic or one-on-

one relationships (Gnyawali & Park, 2011) instead of the network (Bengtsson & Ullah, 2016). Prominent to this school of thought is the direct and simultaneity of cooperative and competitive interactions among firms (Gnyawali & Park, 2011).

Cooperating and competing concurrently may contribute to enhanced competitiveness through knowledge exchanges that can also serve as a competitive tool (Levy, Loebbecke & Powell, 2003) to achieve better collective and individual results (Czachon & Mucha-Kuś, 2014). In tourist destinations, where there is inevitable proximity, establishments are usually competitors in dividing up the market and complementors in creating the market in the first place (Brandenburger, *et al.*, 1996). Insofar as these companies succeed as complementors, they are clearly benefiting each other.

Drivers of coopetition

The tourism business environment is becoming more dynamic and highly innovative and this forces firms to be more involved in alliances that blend competitive and cooperative approaches. There are numerous motives on firms' decisions to adopt a coopetition strategy. The most typical reasons can be explained with game theory and the resource-based view (Ritala, 2012). Coopetition based on game theory refers to creating a bigger pie to increase benefits for all players by cooperating (a focus on market growth) and dividing the pie among the players by competing (a focus on market share) (Brandenburger, *et al.*, 1996).

The literature discusses a number of drivers that either push or pull firms to both cooperate and compete. Hence, different views exist considering the drivers of coopetition in the tourism industry. Raza-Ullah et. al. 2014, identified broad factors that drive firms to compete and cooperate in the coopetition context. These factors are industrial, relational, and firm specific (Gnyawali & Park, 2009), which correlate, overlap, and affect each other. Complementary drivers crafted by Bengtsson and Raza-Ullah (2016) are external drivers relating to industry factors, relation-specific and internal drivers relating to firm specific factors. External drivers include challenges and opportunities in the industry and technological conditions, environmental conditions and external stakeholder influences; relation-specific drivers relate to partners and relationship characteristics; and, internal drivers refer to internal goals and firms' strategies, capability and perceived vulnerability. These either compel or force firms to engage in coopetition (Bengtsson and Raza-Ullah, 2016; Gnyawali and Park, 2011) and can influence competitors' desires and behaviours related to cooperation (Bonel & Rocco, 2007; Lado *et al.*, 1997; Luo, 2007).

Moreover, other factors that drive coopetition include for instance the desire to increase market size (Kraus, Klimas, Gast and Staphan, 2019), resource utilization, risk mitigation and cost sharing (Bouncken and Kraus, 2013; Gnyawali & Park, 2009), resource sharing and acquisition, (Bengtsson and Kock, 2000; Heimerisks and Duyster, 2007), reducing the benefits of competitors, having access to competitor's resources and capabilities (Bonnel and Rocco, 2007; Crick, 2017), changes in structural conditions like cost structure, competitive focus and advantage of scale (Das and Teng, 2000; Khanna, Gaulati and Nohria, 1998; Levy, Loebbecke and Powell, 2003). It's further driven by advancing joint interests and pooling of resource for common purposes, network structures and positions, social, cultural and regulatory changes, technological advances and complexity (Carayannis and Alexander, 2004; Dei Ottati, 1994; Gnyawali and Madhavan, 2001; Oshri and Weeber, 2006). These additional drivers including multidimensional proximity, can provide a good basis for commitment, trust and mutual benefit (Klimas, 2016).

In addition, many firms nowadays are concerned with sustainability issues and aim to achieve economic, social and environmental benefits. This prompts coopetition in which coopetitive relationships are the condition for survival and sustainability. According to Gnyawali and Park (2011) drivers of co-opetition are instrumental for keeping relationships balanced and for coopetition to evolve over time. It therefore requires firms' commitment to the relationship to create more benefits as well as strive for a larger share of the benefits. Coopetition relationships are therefore driven by the heterogeneity of the resources of different firms involved (Gnyawali and Park, 2011).

Outcomes of Coopetition
Coopetitive relationships have been advocated to generate joint value for firms that would not be possible if these firms operated in isolation (Dyer & Singh, 1998), including benefits of cost cutting, stimulation of innovation, firm performance, relational outcomes (Bengtsson & Raza-Ullah, 2016; Cygler, Sroka, Solesvik & Debkowska, 2018), economic and knowledge related value (Volschenk, *et al.*, 2016), amongst other. According to Bengtsson & Raza-Ullah (2016), different outcomes arises from coopetition such as increased competitiveness and competitive advantages, development of technological innovations (Cygler et. al 2018), exploration of international opportunities, and access to needed resources. Coopetition further enhances knowledge acquisition and knowledge creation (Huang & Yu, 2011; Li *et al.,* 2011; Zhang *et al.*, 2010); market extension, technology development and cost reductions.

While firms can achieve collaborative advantages by creating joint values, they can also achieve competitive advantages through leveraging unique private resources. This balance stimulates knowledge seeking, market expansion, and technological progress (Bengtsson and Kock, 2014). In accordance with the resource-based concept, enterprises create coopetitive relationships in order to jointly create intangible assets, and use their knowledge, cooperation, and skills to increase the efficiency of the organization (Cygler, et. al. 2018). Coopetitive relationships contribute to the creation of values (Ritala and Hurmelinna-Laukkanen, 2009), the dynamic development of companies, and an increase in the value of coopetitors (Lechner, Soppe and Dowling, 2016). Often, coopetitive relationships are made of a defensive nature; in addition to strengthening market position, coopetitive relationships also protect market position and increase entry barriers for non-system entities (e.g., companies in the European union). Hence, the outcomes and the different dimensions of the process of coopetition, are more complex at the interorganizational level (Bengtsson and Kock, 2014). Considering the growing complexity of the environment, coopetition becomes the chance for the company's survival and sustainable development (Cygler, et. al. 2018). This however requires the firms to confront and manage the simultaneous and paradoxical interactions between cooperation and competition (Gnyawali *et al.*, 2016).

However, apart from the benefits, there are also drawbacks, threats and risks associated with inter-organizational coopetitive relationships. As a result of the inherently competitive nature of coopetition (Ritala, *et al.*, 2016), firms face risks and vulnerabilities of opportunism and knowledge leakage which can hinder coopetitive innovations (Ritala & Hurmelinna-Laukkanen, 2009; Cygler et. al 2018; Nevin 2016). Bouncken *et al.* (2015) argue that coopetition is loaded with difficulties in opportunistic behaviours, misunderstandings and spillovers that threaten a sense of community fostered by cooperation; this can hamper the positive impact of coopetition on performance and innovation. Coopetition also leads to rise in asymmetric access to resources (Gnyawali, & Madhavan, 2001), uneven balance of benefits, (Cygler, & Sroka, 2017), uncontrolled leakage of information and economic espionage (Lavie, 2006). Coopetitive relationships are characterized as having a high degree of conflict and take diverse forms due to the characteristics, coexistence and interaction of streams of cooperation and competition in the relationship between the firms (Cygler et.al 2018; Lado, Boyd, & Hanlon, 1997). Conflict in a coopetitive relationships may reduce the effectiveness of cooperation and brings about a decrease in the quality of relationships which may result in a loss of trust - particularly by customers-, decline in market position and even tarnishing of company image (Cygler, 2015).

Moreover, *et al.* (2007) discuss the limitations of the cooperative paradigm and criticize its tendency to only consider the positive outcomes of cooperation, suggesting that the negative interdependencies that competition brings also need consideration. This is because the actors involved only have partially convergent interests and end up trading off competitive and collaborative issues. This often results in the need to manage the resultant tensions on a number of different levels (Fernandez, Le Roy, & Gnyawali, 2014; Le Roy & Czakon, 2016; Tidström, 2016).

Coopetition Tension
Coopetition is a paradox of how two firms interact with contradictory logics (Raza-Ullah, *et al.*, 2014) that are present and accepted (Das & Teng, 2000) as a result inter-firm interdependencies (Chou & Zolkiewski, 2018). This paradox involves inevitable tensions because actors strive for both self-expression and collective

affiliation (Lewis, 2000) having inherent contradictions of value creation versus value appropriation (Lacoste, 2012). Jarvenpaa & Wernick (2011) allude to "contradictory yet interrelated elements that on the one hand can enhance value while also fostering opposite". Also known as emotional ambivalence (Raza-Ullah *et al.*, 2014), tension results from conflicting cognitions on the consequences of a coopetitive relationship. Actors in coopetition assess the consequences of their interactions as either beneficial or harmful and this can, respectively, evoke positive and negative emotions simultaneously (Raza-Ullah, *et al.,* 2014). On the one hand, cooperation seeks value creation, collective interest, positive-sum game, value creation and shared benefits complemented by feelings of trust, confidence, and happiness, while on the other hand, competition demands opportunistic, self-interest behaviour, harm, defection, a zero-sum game and private benefits prompting feelings of distrust, greed, and fear (Das & Teng, 2000; Raza-Ullah, 2014). These Paradox elements seem logical in isolation but illogical and irrational when appearing simultaneously (Lewis, 2000), representing a both/and situation without choice between the contradictions that could create alternatives to allow for either/or situation (Raza-Ullah, *et al.,* 2014).

Paradoxes emerging from inter-organizational relationships, also referred to as paradoxes of performance surface from competing goals and demands of various stakeholders (Jay, 2013) and tend to be more challenging to control, hence the tension (Raza-Ullah, *et al.*, 2014). The coopetition paradox transpires between competing firms serving the same market but who acknowledge the need to cooperate due to drivers (internal, relation-specific and external) that have stronger appeal despite ongoing competition (Raza-Ullah, *et al.,* 2014). This was demonstrated by rival companies Sony and Samsung example of coopetition in a joint venture that developed the LCD TV panels. Collaborating firms can also experience coopetition paradox when interests conflict that instigate competition despite ongoing cooperation. For instance, Microsoft launched a Surface book in the main market of its top partners including Asus, Lenovo, and Dell, while still keeping the collaboration with them (Bengtsson & Raza-Ullah, 2017).

Dynamics of co-opetition is shaped by industry as well as firms' capabilities to pursue a win-win approach, manage the tension, and balance the relationships (Gnyawali & Park, 2011) resulting in strong and resourceful alliances where individuality of members is expressed (Lewis, 2000). This balancing, referred to coopetition capability is "the ability to think paradoxically and to initiate processes that help firms attain and maintain a moderate level of tension, irrespective of the strength of the paradox" (Bengtsson, Raza-Ullah & Vanyushyn, 2016). It requires three types capabilities: analytical – advocating paradoxical thinking and coopetition mind-set; balancing – referring to development and utilization of routines that help integrate, organize, and balance the simultaneous contradictory demands effectively; and emotional capabilities – acceptance and regulation of ambivalent emotions (Raza-Ullah, Bengtsson & Vanyushyn, 2018). Coopetition capability empowers senior management to maintain moderate level of tension which is evidenced to be best for alliance performance (Raza-Ullah, *et al.*, 2018).

3. Research Design and Methodology

The aim of the study is to determine the drivers and outcomes of competition and cooperation at the inter-organizational macro-level, among small and medium enterprises (SMEs) in the tourism industry at Lüderitz. It further explores the tension and subsequent emotions that emerge through the interaction among firms. This research adopts a qualitative method with an interpretive philosophy (Denzin & Lincoln, 2011) that aims to make sense of subjective and socially constructed meanings expressed by the phenomenon being studied (Saunders, *et al.,* 2016). Exploratory and ethnographic in nature, coopetition at Lüderitz tourism destination is studied as an act of sense making with a focus on how the establishments interact, cooperate and compete. Ethnography is used to study the culture or social world of a group where the researcher participates, overtly or covertly, in people's daily lives; watching what happens, listening to what is said, and/or asking questions through informal and formal interviews, collecting documents and gathering whatever data are available to throw light on the issues that are the emerging focus of inquiry (Hammersley & Atkinson, 2007; Saunders, *et al.*, 2016). This approach is useful for studying organized groups and surroundings, such as represented at Lüderitz destination, with specific focus on what drives their interactions, the outcomes of such interactions and possible tensions and emotions experienced. For the study of coopetition, it makes visible not only the actual business activities undertaken, but also perceptions, decisions made and ways of thinking, but also the

overall coopetitive culture (Kylänen & Rusko, 2011). We therefore include various on-site observations, along with in-depth interviews conducted and documents made available.

Data was collected through in-depth interviews and a survey completed by the owners and/or managers of the businesses. Based on the specific nature of tourism in Lüderitz, three different sectors were included in the study as follows: three (3) tour operators, three (3) restaurants and seven (7) accommodation establishments; they participated in the interviews that had duration of between 45 minutes to one (1) hour. One respondent from the accommodation establishments completed a written interview as she was not at the destination during the time interviews were conducted. Respondents are kept anonymous (Berg, 2001) and are referred to according to according to the contributions made to relevant topics.

4. Results and Discussion

Lüderitz as a tourism destination consists of diversified categories of SMEs that operate in close proximity and are inter-dependent due to limited resources. Hence, competing and cooperating between the actors is inevitable, leading to both intentional and unintentional process of coopetition. Coopetition occurs in this limited geographical area where actors are embedded within community ties or networks. Their network embeddedness provides common understanding among the competing actors required for cooperative activities. Hence, their coopetition is based on trust and social norms rather than formal agreements, which we argue that it is largely stimulated by the seclusion of Lüderitz destination due to its geographical location that makes it not easily accessible by road. Kylänen & Rusko (2011) & Tidström (2008), allude to spontaneous actions stimulated by changes in the external environment, such as a variation in government policy and unfavourable market trends. These external factors are prone to lead actors to quick decisions on whether to cooperate or compete.

When respondents were asked to rank the importance of the destination to their businesses generating higher profits, half of the respondents gave a rating of 10/10, implying 100%, while the rest gave ratings of 9, 8 and 3. Regarding the value placed on relationships at destinations, half of the respondents gave a rating of 10, while the rest gave ratings of 9,8 and 3. Most respondents (64%) indicated that the effort/cost of their cooperative activities are equal to the benefits of cooperation. Two respondents (18%) indicated higher benefits while two indicated lower benefits compared to effort/cost of cooperation. It is interesting to note that benefits of cooperation are not higher than cost, yet, respondents maintain that they have predominantly cooperative relationships.

Drivers and outcomes of coopetition

Drivers of coopetition: The results reveal that businesses in Lüderitz are engaging in coopetition in several different ways. Geographic proximity, customer preferences or needs, trust and commitment are the crucial drivers for coopetition. For instance, respondents alluded to instances where they or their competitors would offer a helping hand and mutual assistance to one another, which is an additional driver for coopetition.

Businesses are almost *obliged* to constantly interact with other firms as they are neither self-contained nor self-sufficient (Chou & Zolkiewski, 2018). For example, some of the respondents, particularly in the lodging businesses – stressed that collaborating with other competitors was necessary because of the geographical proximity; Lüderitz being a small and secluded town. Hence, they see coopetition relationships as a condition for survival and sustainability (Gnyawali and Park, 2011) in the quest to enhance destination image and satisfy customers. As alluded to by a respondent when asked how they would describe the competition and/or cooperation at the destination, they further highlighted the drivers as follows: *"I would say we have a common understanding relationship with competitors. We are not in a fight with other accommodations and I know other (same type of accommodations) recommend their guests to contact us when they are fully booked as well as we send them our guests. Due to the fact every guest expects something different, we explain honest what we offer and when I get the feeling they are looking for a different type of accommodation, I recommend one where I think they might be happy. I think Lüderitz is too small with too many offers of accommodation to really cooperate or compete. As far as I see it, we have a "golden middle way" (sic).*

In addition, respondents indicated important criteria upon which coopetition interactions are based. For instance, when a competitor opts to collaborate, they assess and consider customers preferences in terms of prices/rates, location, products and services; commitment, delivery standards in terms of consistency in product and/or service, and credibility. These, we argue to be additional drivers of coopetition and they are based on trust. As expressed by one respondent: "*For me it's important that they offer what they promise. I don't want to lose a person's trust by recommending/working together with someone who is not honest with the program (sic) they offer to their customers*".

Outcomes of coopetition: Coopetitive relationships have been advocated to generate joint value for firms that would not be possible if these firms operated in isolation (Dyer & Singh, 1998). The result reveals that, customer satisfaction, enhanced destination image, cost saving, information sharing, enhanced innovation, market reach, exploration of international opportunities, access to require resources and firm growth represent the key shared outcomes of coopetition. The results agree with the views of these researchers Cygler et. al (2018), Bengtsson & Raza-Ullah (2016), Huang & Yu (2011), Li *et al.* (2011) and Zhang *et al.* (2010).

Apart from the positive outcomes, there are also drawbacks. For instance, although enhanced innovation is seen as one of the positive outcomes of coopetition, some respondents pointed out that the proximity of businesses results in little innovation due to competitors replicating others' new initiatives. This aligns with the views of Bouncken *et al.* (2015) that coopetition is loaded with difficulties of opportunistic behaviours that can hamper the positive impact of coopetition on performance and innovation. Furthermore, as a result of the inherently competitive nature of coopetition (Ritala, *et al.*, 2016), firms face risks and vulnerabilities of knowledge leakage which can hinder coopetitive innovations (Ritala & Hurmelinna-Laukkanen, 2009). The fear of exploitation therefore makes it difficult for information sharing among some businesses.

The study further identified other challenges that are not necessarily the result of coopetition but that impede businesses from optimizing coopetition relationships. Factors such as the town lacking local and international marketing initiatives, Government regulations coupled with administrative delays, lack of support from the town council, destination being far from major towns and other tourist destinations were identified. One of the challenges revealed by the empirical study is the lack of joint marketing of Lüderitz as a destination. Marketing a destination is to 'market the area as a single, unified tourist product' (von Friedrichs Grangsjo, 2003) i.e. the combination of all the related products in an area represented as a bigger whole (Kylänen & Rusko, 2011). In the destination, all actors work closely together to create an attractive tourism package, developing markets jointly rather than in isolation (Palmer, 2002) which creates value for the destination and in turn benefits for individual businesses. This is closely linked to the actor school of thought, where the actors collaborate to bake a bigger cake, an activity that is usually far from the customer in order to create a "critical mass", and then compete to take the largest share of the cake (Vapola, Tossavainen & Gabrielsson, 2008; Brandenburger, *et al.*, 1996).

The study results reveal that most of the Tourism SMEs in Lüderitz focus on separate marketing initiatives of individual businesses; there is no joint marketing of the destination. This implies that the firms compete far from the customer and cooperate when they have attracted the customer, particularly, by referring customers to other businesses when they are unable to meet customer needs. Essentially, this aligns with an example in the study by Bengtsson and Kock (2003) of two Swedish competitors in a strategic alliance, Trellex Ltd. and Skega Ltd., who were cooperating for product development while simultaneously competing in the marketing of the products. These are two examples that contradict the actor school of thought. In the case of Lüderitz destination, the lack of joint marketing implies the following: 1) the challenge that the destination does not gain traction i.e. not having an increase in the number of tourists that leads to 2) the market or "cake" not becoming bigger, which has impact on 3) the long term competitiveness and success of the destination (Wang & Krakover, 2008). The current scenario is that two new restaurants and four new Take Away businesses opened at Lüderitz over the last six months; the actors have thus decreased market share. The results reveal that businesses are willing to participate in marketing the destination; one respondent for instance suggested the establishment of a forum by the town council that will jointly market

tourism businesses in order to "grow the size of the cake". Kylänen & Rusko (2011) provide a Finnish example where competitors created a Destination Management Organization (DMO) to facilitate the marketing and strategic planning of the Pyha¨-Luosto tourism destination. This is a case that the businesses in Lüderitz can learn from that will allow the destination to gain a competitive advantage in the global market.

Coopetition Tension: Coopetition at Lüderitz has predominant characteristics of friendliness, satisfaction, comfort, relaxation and enthusiasm. This is because approximately 80% of respondents indicated that they don't regard their counterparts offering similar services as competitors, implying coopetitive relationships that are dominated by cooperation. Other less dominant (7%) characteristics are hostility and fear. These characteristics were indicated by some respondents, especially where negative business relationships of "betrayal" or "backstabbing" were experienced. Particularly fear was perceived as a "positive" characteristic because according to one respondent: "it helps me perform better".

Overall, according to the results coopetition tension and consequent emotions were not explicitly expressed. One of the main reasons could be the dominant cooperative culture of coopetitive relationships. However, approximately 31% of respondents expressed emotions of anger, moderate hostility and frustration towards their competitors as they recalled instances of backstabbing, betrayal, replicating of unique initiatives that could pose competitive threat or inflexible operating hours. The subtleness of coopetitive tension alludes to the coopetition capability at Lüderitz destination, where SME owners demonstrate "the ability to think paradoxically and to initiate processes that help firms attain and maintain a moderate level of tension, irrespective of the strength of the paradox" (Bengtsson, *et al.,* 2016). As well demonstrate by one respondent when asked about a situation where they need to cooperate but where emotions may hindered coopetitive interaction: *"Yes, I have* experienced such situation, but I firstly try to not to take things personally when it is for the good of guests and secondly, in Lüderitz there are not many alternatives. The only line I draw with cooperation is when another business would put out bad words about us or there is proof the (sic) operated illegal (sic) or unethical (sic). Another respondent relayed a backstabbing experience and concluded: "We resolved our differences with this competitor; now we are friends…. she will never do it again…. This is how we do things in Lüderitz". Evidently, respondents possess analytical, balancing and emotional capabilities that empowers them to maintain moderate level of tension for best alliance performance (Raza-Ullah, *et al.,* 2018).

5. Conclusion

This study considered the drivers and outcomes of coopetition at Lüderitz destination and explored the tension and subsequent emotions that emerge through the interaction among firms. An interesting finding is the perception that tourism businesses have about competition and cooperation. Approximately 80% of respondents indicated that they don't regard their counterparts offering similar services as competitors, implying coopetitive relationships that are dominated by cooperation. The dominant drivers of coopetition are external drivers under categories of for instance environmental conditions and external stakeholder influences; these include geographic proximity, customer preferences or needs, delivery standards in terms of consistency in product and/or service, and credibility. The next dominant driver is relation-specific drivers that relate to partners and relationship characteristics such as location, trust and commitment under the notion of "offering a helping hand and mutual assistance to one another". The least dominant is the internal driver referring to internal goals and firms' strategies, capability and perceived vulnerability. This implies that coopetition decisions are not necessarily explicitly strategic but more relational.

The outcomes of coopetition are customer satisfaction, enhanced destination image, cost saving, information sharing, enhanced innovation, market reach, exploration of international opportunities, access to required resources and firm growth. The outcomes of "market reach and exploration of international opportunity" are mostly impeded by the lack of joint marketing of Lüderitz as a destination, a main challenge uncovered in the empirical study. The effects are 1) that the destination does not gain traction i.e. not having an increase in the number of tourists leading to 2) the market i.e. "cake" not becoming bigger, which has impact on 3) the long-term competitiveness and success of the destination. The businesses have decreased market share.

Coopetition tension and consequent emotions are not explicitly expressed. Apart from the dominant cooperative culture of coopetitive relationships, it alludes to coopetition capability at Lüderitz destination. Businesses possess analytical, balancing and emotional capabilities that empowers them to maintain moderate level of tension for best alliance performance.

Areas for Further Research

The findings about Lüderitz tourism destination perceptions about cooperation and competition are interesting as well as encouraging. A comparative research can be explored at other destinations, preferably those at larger geographic areas to assess whether results will be similar. Furthermore, research can explore coopetition dynamics in other industries. This study considered coopetition in inter-organizational level, with a focus on dyadic relationship. Further research can investigate the dynamics of coopetition at other levels, such as networks and ecosystems. Lastly, the concept of innovation in coopetition received minimal focus and would be interesting to assess.

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Paper 17

Decision making and strategic management accounting techniques in small manufacturing enterprises in Cape Town

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Abstract: Informed decision-making is arguably a critical success factor towards achieving economic sustainability in business. Management accounting has been pre-occupied with the development of techniques which not only facilitate operational decision-making but also enhance strategic decision processes to aid the survival of businesses in competitive and changing environments. In South Africa, Small Manufacturing Enterprises (SMEs) usage of decision support systems (DSS) coupled with strategic management accounting techniques (SMA) largely remains unexplored. This study investigated the usage of these tools and techniques SMEs. The scope of this study is limited specifically to identifying the types and frequency of use of the DSS and SMA techniques found in these SMEs. Considering that manufacturing processes tend to differ by sub-industries, this study uses a stratified random sampling technique to achieve a fair representation of each industry sampled. Data was collected using a questionnaire, and a total of 104 usable responses were obtained. Descriptive analysis was performed using SPSS (Version 24) software. Results showed that there was a low uptake of the DSS and SMA techniques. Reliance on non-sophisticated techniques and use of intuition was common in decision making. The study recommended that awareness should be raised, and the non-adoption factors of these techniques should be investigated further.

Keywords*: Small Manufacturing Enterprises, Decision support systems, strategic management accounting, break-even analysis, Target costing*

1. Introduction

Defining the parameters of small and medium businesses has been a raging debate worldwide. South Africa has not been spared from this debate, and recently the definition of what constitutes small businesses has been revised. There remains no consensus on the definition of small businesses as different institutions provide inconsistent criteria for what constitutes small businesses (Berisha & Pula, 2015). For this study, small, micro and medium business enterprises (SMMEs)[1] definition is based on the 1996 Act. Notably, the threshold of what constitutes these SMMEs was revised, and the categories were updated through a Government Gazette recently (South Africa, 2019). Table 1 shows this new classification of SMMEs in the manufacturing sector.

Table 1: Classification of the manufacturing sector SMMEs

Sector or sub-sector	Size or class of enterprise	Total full-time or equivalent of paid employees	Total Annual turnover in Rands
Manufacturing	Medium	51-250	≤ 170 million
	Small	11 – 50	≤ 50 million
	Micro	0 – 10	≤ 10 million

Extract; South Africa (2019)

This study targeted SMEs with between 6 to 250 employees. The smaller SMEs with five or less likely to make use of DSS and SMA techniques meaningfully. The exclusion of smaller businesses who employ less than five employees has been used by various researchers and is based on the notion that these very small organizations do not make use of any sophisticated management systems (Fatoki, 2012).

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[1] In terms, the South African National Small Business Act No. 102 of 1996, small, micro and medium business enterprises (SMMEs) are defined as "*separate, distinct business entities including co-operative enterprises, organizations managed by one owner or more which, including their branches or subsidiaries, if any, are predominantly carried on in any sector or subsector of the economy*" (South Africa, 1996).

For simplicity, the acronym 'SMEs' is used to refer to small and medium manufacturing enterprises, a term which is widely used in some business circles to refer to small businesses who specialize in manufacturing activity. Academically, the term has been also used by a limited number of scholars and is generally understood to be referring to small businesses who are engaged in the core manufacturing activity (Kim, Knotts & Jones 2008). These SMEs in the manufacturing sector, according to Statistics South Africa provided a third of SMMES employment but contributed less than 10% of the total revenue in the 2016 financial year (Trade and Industrial Policy Strategies, 2019). Their main role is intertwined with the major supporting role they play to the other SMMEs in different sectors especially the retail sector.

The importance of SMMEs in South Africa is continually echoed in government policy. SMMEs are regarded as key players in job creation, economic growth, and innovation (BER, 2016). Scholars and policymakers are in consensus that a growing SMMEs sector results in job creation which fuels economic growth. Excluding the micro-enterprises, the SMMEs sector employed an estimated 8.9 million people in the first quarter of 2018. The total contribution of the SMMEs to the economy of South Africa was estimated at 40% of the total turnover at that same period (SEDA, 2018). Despite the significance of this sector in the economy, growth and economic sustainability remain an elusive goal. Persistent failure and slow growth continue to reign in the SMMEs landscape and have been highlighted in business and academic literature (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018; Brewer, Coetzee & Meiring, 2018).

Undeniably, government interventions have made little progress in slowing down this scourge with business observers reporting that more than 70% of SMMEs are still failing within two years of operation and the risk remains high as it was two decades ago (Businesstech, 2018). The Small Business Institute (SBI) noted that inconsistency in intervention policies coupled with the lack of data on the business dynamics and unique characteristics of these businesses was impeding any progress in remedying this situation. Notwithstanding the challenges faced in this sector, the National Development Plan (NDP) economic policy forecasts that by 2030 the SMMEs should account for 90% of total employment opportunities (Businesstech, 2018). In the quest for solutions, it is imperative to evaluate business processes which promote sustainability in businesses and one such key area is decision making processes.

Butterfield (2016) observes that unlike previous generations, business managers of this day and age are confronted with a plethora of information and the main challenge is to filter relevant information and use it to improve decision making. Matambele and Van Der Poll (2017) goes further to suggest that misinformation, human error and using inadequate tools and techniques to process information can result in flawed decisions that can negatively impact the performance of the business. In SMMEs, key operational and strategic decisions are often made by owner-managers. In manufacturing SMEs, the situation is often exuberated by the fact that most of these owner-managers possess limited business management skills since they are often technical entrepreneurs with manufacturing experience who ventures into their manufacturing businesses (Fatoki, 2014). Urban and Naidoo (2012) summarized the types of decisions that these manufacturing SMEs are often faced with. These include strategic decisions or long-term game plans such as what types of products to produce, which markets to focus on, when to develop new products and how to expand their operations. Operational decisions may include production planning, levels of raw materials and output to produce, including meeting customer demand. Control decisions often arise in issues encountered during operations such as machine breakdown, managing labor costs, and product quality issues. Management accounting techniques can be used to aid decision-making processes.

Scarlet (2009) highlighted the role of management accounting in facilitating decision making by providing the necessary support information timely. This can be achieved by using decision support systems (DSS) techniques that cater to both long-term and short-term decisions. Drury (2013) elaborates that short-term decisions are operational and may be reversed without affecting the business in the long-term. Whereas long-

term decisions are strategic and often involve financing, including business survival decisions. Abdel-Kader and Luther (2006) identified Cost Volume Profit (CVP) analysis or breakeven analysis, stock control models, product and customer profitability analysis as some of the management accounting short-term decision-making support tools. For long-term support cost of capital analysis methods such as payback period, net present value (NPV), Accounting rate of return (ARR) and Internal rate of return (IRR) could assist managers in making the correct long-term financing decisions. Arguably, the business environment has changed with technological advancements, changing consumer tastes and increased competition due to globalization (Shah, Malik & Malik, 2011).

Management Accounting has also evolved and developed techniques which may give the firm a birds-eye view of the competitors, markets and the changing business environments. These tools are often termed strategic management accounting (SMA) techniques (Juras,2014). There are several definitions of strategic management accounting, and management accounting scholars are yet to find common ground on this issue. One such definition is given by the Chartered Institute of Management Accountants (CIMA). According to this board, strategic management accounting is defined as *"a form of management accounting in which emphasis is placed on information which relates to factors external to the entity, as well as non-financial information and internally generated information"* (CIMA Official Terminology, 2005). Despite not having a comprehensive definition of SMA in research, there exists a consensus that SMA models are forward-looking and can assist in strategic decisions (Cescon, Constantini & Grassetti, 2018).

SMA techniques include target costing, strategic costing, product life cycle costing, value chain analysis, competitor position monitoring, and balanced scorecard (Scarlet, 2009). Strategic costing is a process ranking costs according to their strategic relevance such as matching competitors marketing and pricing costs (Shah *et al.*, 2011). The balanced scorecard (BSC) is a strategic performance management tool that links the business vision or strategy to other business perspectives (Johnson & Kaplan, 1987). The combination of DSS and SMA techniques can greatly improve the economic sustainability of a firm considering the possible benefits of informed decisions which can lead to improved efficiency and effectiveness of a firm (Merigo, 2012).

Decision support systems (DSS) techniques can be used to analyze operational and capital investment decision of a firm (Scarlet, 2009). Drury (2013) identifies techniques such as Cost- Volume- Profit (CPV) techniques as useful in operational decisions such as profit maximization. Manufacturing companies also have to determine stock ordering levels of inventory, storage of work in progress and finished goods. A lot of stock models have been designed to facilitate this with basic ones such as first in first out (FIFO), Economic order quantity (EQO) technique and more advanced ones like Just-In-Time (JIT) and flexible manufacturing systems (FMS) (Shen, *et al.,* 2016).

There has been a raging debate on the relevance of DSS and SMA management accounting techniques in small businesses. Supporting arguments for these techniques are based on the dynamic business environment which leaves organizations with complex choices that often have long term implications on the sustainability of the firm. In this situation, a calculative approach is deemed rational. Relevant and timeous information is required by the decision-maker to choose the most optimal decision. Often multiple and complex variables have to be considered, and advanced management accounting provides the decision-maker with calculated approaches to consider alternatives and their implications (Nielsen, *et al.,* 2015). Therefore, because all firms have to make decisions between competitive alternatives management accounting techniques can be of use to any organization. Importantly, SMEs in South Africa considering the competitive environment they exist and challenges that are hindering their growth leading to failure, it is important to evaluate their usage of such techniques.

Given this background, this article aims to investigate the frequency of usage of DSS and SMA techniques in SMEs in Cape Town. The research question is then posited as follows; Which DSS and SMA techniques do SMEs in Cape Town use and to what extent? To answer this question, the rest of this paper is structured as follows: (2) Literature Review, (3) Research Design and Methodology, (4) Results Presentation (5) Discussions and conclusion.

2. Literature Review

In this review, the use of the contingency theory approach in management accounting studies is explored, followed by a review of prior literature on the usage of DSS and SMA techniques in SMEs.

Most scholars argue that there exists no one size fits all approach for management accounting techniques. The crux of this notion is that internal organization factors, as well as external environment, often play a major role in the choice of techniques a firm uses. One such factor is the firm size. Firm size has been identified as a predictor of usage of mainly advanced management accounting techniques. For instance, Brierly (2011) surveyed 272 manufacturing firms in Britain intending to compare product costing systems between Large firms and SMEs. Results showed that large firms used more sophisticated techniques than SMEs and more advanced techniques such as activity-based costing (ABC) were more unlikely to be found in SMEs. Armitage, Webb, and Glynn (2016) further contended that size resulted in complex operations. For example, large companies have diverse product ranges, uses mass-production approaches and are more decentralized. They further argued that large companies also focused on execution activities such as implementing strategies and developing control systems, whereas SMEs were preoccupied with survival. However, as SMEs grow their need for more sophisticated management accounting techniques also becomes evident. Santini (2013) observed that SMEs which operate in a highly complex environment used more SMA techniques. This view is critical and justifies the contingency theory approach in studying management accounting techniques.

Otley (2016) elaborates that "*a contingency theory must identify specific aspects of an accounting system which are associated with certain defined circumstances and demonstrate an appropriate matching*" This definition identifies two crucial elements of the theory. Firstly, the same accounting system or technique should have specific elements that can make it relevant to a certain environment. Secondly, an appropriate match should then be established. In other words, the existence of certain environmental factors (internal and external) explains the need for a variety of management accounting techniques that mediate the outcome. Most studies use independent variables in contingency studies such as internal (organizational structure, size, and strategy) and external (uncertainty, competition, technology and culture) and dependent variable such as performance, control systems and product innovation (Chenhall, 2003; Waweru, Hoque & Uliana, 2004; Farouk Abdel Al & Mclellan, 2011; Ahmad & Zabri, 2015; Zeng & Chen, 2017).

Interestingly, Hall (2016) argues that this theory focuses on organizational rather than individuals who have a direct influence on the choice of management accounting techniques. To that effect, the researcher proposed a fusion of psychology theory into contingency theory. The contingency theory undoubtedly continues to be refined and have over the years provided lenses which aided the study of management accounting techniques. The ensuring discussion examines prior studies on DSS and SMA techniques on SMEs. Prior studies on the usage of sophisticated tools such as DSS and SMA techniques in small businesses are relatively scarce as most research literature focuses on larger firms and often justifies the notion that sophisticated is best suited for larger organizations (Wu & Boateng, 2010). However, in developing countries, larger organizations often are lagging in the adoption of sophisticated management accounting techniques. For instance, Ojua (2016) lamented the lukewarm attitude towards the adoption of SMA techniques by Nigeria manufacturing firms. Managers were often of the opinion that traditional or basic management accounting techniques were enough. On the other hand, Waweru *et al.* (2004) identified that the no need for change stance and fear of change hindered the adoption of more management accounting techniques in other South African firms. Lucas, Prowle and Lowth (2013) cautioned against this contentment with basic management accounting techniques stating that it often led to a misunderstanding of costs resulting in incorrect pricing and product mix decision.

The adoption of sophisticated management accounting techniques also varies in SMEs found in different economic regions. Andor, Mohanty, and Toth (2015) illustrated this with their large cross-section survey which covered 70,000 firms in 10 Eastern European countries in different economic states resulting in 333 usable responses. They compared these results on the usage of DSS techniques such as payback method, discounted cash flows (DCF), ARR and IRR with results from 25 other countries grouped in three income brackets. Significant differences were apparent such as developing economies tended to rely heavily on the

payback period. limited financial resources which forced a small business to pursue liquidity goals was one of the reasons. On the contrary, firms in developed countries preferred more sophisticated techniques such as DCF. Overall, factors such as limited financial resources, strategic fit, human capital amongst others seemed to be influencing the usage of DSS techniques in small businesses. Despite the comprehensiveness of this study, the major limitation is that the findings were based on surveys that often lack details of usage of particular techniques that can be gleaned from the mixed-method approach.

Rufino (2014) in the City of Tarlac, used this mixed-method approach to investigate management accounting practices in SMEs. The important insight gained from this study was that managers avoided sophisticated management accounting techniques because they assumed, they were time-consuming and costly to implement. These observations are limited in their applicability because of the smaller sample size. Admittedly, the effective usage of most of DSS and SMA techniques requires a higher understanding of financial and accounting functions. These advanced skills are usually obtained in post-high school studies and are built on the basics taught in high school. This assertion is confirmed by Rossi (2016) who investigated DSS techniques in Italy and cited that most SMEs resorted to the use of simpler techniques such as the payback method as opposed to larger firms who constantly used DCF techniques. Further analysis of the results showed that decision-makers with only high school qualifications tended to rely more on intuition compared to those who received further formal training. Worth noting was the specific observation that those with finance or accounting training used DCF techniques more than those with training in other fields. This paper was largely conceptual and empirical evidence would have increased the reliability of these results. Concurring with this results, Cvetkoska (2016) in a survey of DSS techniques in SMEs in Macedonia stated that 90% of micro, 78% of small and 55% of medium enterprises managers relied on experience and intuition in decision making Those who used stock models and CVP analysis revealed that they learned these techniques informal education and seminars. Thus, the usage of sophisticated management accounting techniques of which most of the DSS and SMA usage is affected by capabilities and perceptions of users. However, the literature reveals other factors that are at play. The firm overall strategy seemed to have been explored as well.

Shah *et al.* (2011) opined that most SMA techniques require a clear and well-formulated strategy of which rarely exists in SMEs. This view is seconded by Gliaubicus (2012) who stressed that to implement a balanced scorecard (BSC) which is an SMA technique the company should have a clear strategy, mission, and vision of which the performance indicators will be built upon. Chimucheka (2013) stressed the importance of strategic long-term plans for SMEs in South Africa as a vehicle for achieving growth. Fatoki (2012) lamented the lack of overall strategy but noted that most SMEs seem to have pricing strategies in place. Albeit there is no consensus on the prerequisite of a well-formulated strategy in SMEs for them to adopt SMA techniques amongst scholars. Lucas *et al.* (2013) pointed out that there was no conclusive evidence that the lack of adoption of SMA techniques on the UK SMEs sampled was due to the absence of formulated strategy. Admittedly, the researchers noted that lack of clear strategy made some SMA techniques irrelevant for SMEs, but most of SMA techniques were not adopted for other factors such as cost and availability of accounting resources. In conclusion, there are many factors that affect the usage of DSS and SMA techniques in SMEs as discussed. Lucas *et al.* (2013) summarize the following factors as reasons for low adoption of sophisticated techniques which includes most DSS and SMA techniques in SMEs compared to large organizations:

- Size, the larger the organization, the greater the need for sophisticated management accounting techniques.
- Financial constraints, those organizations with greater profit, more cash flow and credit availability tend to use more sophisticated management accounting techniques.
- External stakeholder requirements,
- Managers background and experience, managers with a financial and accounting background, were more likely to use sophisticated management accounting techniques.
- The nature of operations and the environment affected the choice of management accounting techniques.
- External stakeholders' requirements.

These factors might also be prevalent in South African SMEs usage of DSS and SMA techniques as few researchers reported their low uptake in different provinces of the country. Of the few studies found on management accounting, the focus has been on basic tools such as performance measurement and budgets which appears to be relatively adopted by most SMEs especial those in the retail sector (Madaukwe & Kamala, 2016).

Seseni and Mbohwa (2017) conducted a case study on furniture manufacturing SMEs in Soweto and discovered internal activities and supply chain management system in place since their supplies affect the quality of their products. This is closer to what Porter's value chains emphasize. Rundora, Ziemerink, and Oberholzer (2013) investigated barriers that prevented small manufacturing firms in Southern Gauteng region from adopting Activity-based costing (ABC). The non-users of ABC cited the higher cost of implementation as the main reason for non-adoption. This study also found that the size and age of the firm played a pivotal role in the adoption of ABC. These results are limited in application since there are based on perceptions and the sample size was very small.

Other studies have reported mixed results, but the general trend was low usage of management accounting and the lack of skills and awareness of these techniques in SMEs (Brijal & Enow, 2014; Mutezo, 2013). In response to these challenges, Reynolds, Fourie, and Erasmus (2015) sought to develop a simplified BSC tool for South African manufacturing SMEs. The implementation and awareness of this tool by these manufacturing SMEs remain unexplored. Given this scarcity of studies on the adoption of management accounting techniques, especially the advanced ones, make it difficult to understand the level and effectiveness of most of these tools in South African SMEs. Interestingly, Lavia Lopez and Hiebl (2015) conducted a systematic review of 73 management accounting research papers focusing on SMEs in different economies. This study was important in understanding if management accounting practices found mostly in developed economies were relevant and applicable in developing countries. Some researchers believed that these Western-style management accounting systems were not readily adaptable to the firm specifics of SMEs in these regions. This review was largely affected by the scarcity of management accounting usage in developing economies SMEs. This research gap is what this study attempts to fill.

3. Research Design and Methodology

Creswell (2014) defined research design as the overall strategy, which is followed to answer the research question. This study is based on a positivistic paradigm. This research paradigm assumes that reality is external, and data can be extracted by the observer independently (Bosman, 2010). To achieve this, a quantitative approach was adopted and for convenience, a structured questionnaire was used to collect data from the targeted population.

The population of the study was identified through an online business directory (Kompass, 2018). A total of 1 187 manufacturing SMEs located in the city of Cape Town were targeted. The sub- Industry division of the directory was used, and these overlapped the standard industrial classification (SIC) used in South Africa (StatsSA, 2013). Brierly (2011), postulated that management accounting techniques used often vary with industry type or manufacturing processes. Therefore, it was necessary to divide the population into different industries and draw an equal sample from each stratum. This was achieved using a stratified random sampling technique. Besides, the delimitation criteria of employees between 6 to 200 were applied since the generated information from the directory included the estimated number of employees for each firm. Table 2 shows the population distribution and targeted sample size.

Table 2: Target population by sub-industry and sample size (Source; Researcher)

Manufacturing Sub-industry	Sample size
Clothing and footwear	21
Chemicals, Pharmaceuticals & Plastics	31
Electrical, Electronics & Optical	15
Paper Printing and Publishing	16
Metals Machinery & Engineering	17

Manufacturing Sub-industry	Sample size
Food and Beverages	19
Total	**119**

A sample size of 10% was extracted from each stratum, taking into consideration the feasibility of the study in terms of financial resources and time available for the researcher to complete this study. The questionnaire design was adopted from previous management accounting techniques studies with variations made to suit the given environment (Chenhall & Langfield-Smith, 1998; Abdel-Kader & Luther, 2006; Ahmad, 2017). The full questionnaire covered a range of management accounting techniques, but for this study, only questions relating to DSS and SMA techniques were considered. The primary target was the decision-makers in SMEs. These included owner-managers, other senior managers, and accountants who were familiar with the usage of management accounting techniques in their firms. The questionnaire had a profiling section were relevant information about these decision-makers, and their firm was collected so that the analysis of results could be aided.

The questionnaire was tested for reliability using Cronbach Alpha. Bryman (2012), identifies the Cronbach's alpha as a commonly used test of internal reliability. The calculated score of this test ranges between 0 and 1. A score of more than 0.8 is taken as a reflection of a higher level of internal reliability. An average Cronbach alpha coefficient of 0.934 was obtained for the questionnaire used for this study. The final draft of the questionnaire was presented before the ethics committee of the affiliated university, and after clearance, data collection commenced. Data were collected by administering the questionnaire face to face. This approach gave the researcher control of ensuring that only the intended respondents were the ones who completed the questionnaire. Regardless of the whole exercise being time-consuming, the response rate of the study was maximized, and non-response bias was limited.

4. Results Presentation and Discussion

Response rate and profiling
A total of 104 usable questionnaires were collected from the fieldwork yielding a response rate of 87.4%
Table 3 depicts the distribution of the number of collected useful responses by sub-industry.

Table 3: Responses results by sub-industry (Source; Researcher)

Manufacturing Sub-industry	Targeted respondents	Responses obtained	Sample size %
Clothing and footwear	21	19	18.3%
Chemicals, Pharmaceuticals & Plastics	31	27	26.0%
Electrical, Electronics & Optical	15	10	9.6%
Paper Printing and Publishing	16	14	13.5%
Metals Machinery & Engineering	17	16	15.4%
Food and Beverages	19	18	17.3%
Total	**119**	**104**	**100%**

The chemicals, pharmaceuticals and plastic industry dominated our sample with 26%, and the smallest share was 9.6% in the electrical, electronics and optical industry. This widespread coverage of different industries ensured that DSS and SMA technique usage findings were not dominated but one particular industry. The owner-managers accounted for 23% of the sample, and 61% were various managers who took part in decision making. 16% were accountants and concentrated in larger medium-sized firms. 44% of the decision-makers had between 11 to 20 years of experience in managing. New managers with less than 5 years of experience accounted for 18% of the sample. Most of them had a post-matric qualification with 37% completed short courses and 35% held a college diploma compared to only 13% who only had a high school education. Of these qualifications only 24% were accounting-related a factor which could impact on their knowledge of DSS and SMA techniques.

Interestingly, 58% of the firms outsourced mostly their financial accounting reporting and statutory submissions to accounting advisory firms and limited their in-house accounting function to the recording of transactions. During fieldwork data collection, some of the owner-managers revealed that they only limited their services to statutory returns submissions even though they were aware of advisory services offered by these firms. The role of external accountants and advisory firms in SMEs will need to be fully explored as it beyond the scope of this study. The size of the firms surveyed was based on the number of employees and annual turnover. 20% of the responding firms employed between 6 to 20 employees. Those with 21 to 50 employees accounted for 57% of the sample, and the medium-sized with 51 to 250 employees constituted 23% of the sample. In terms of annual sales turnover, 28% made less than one million Rands. 43% earned more than one million but less than 5 million Rands. On the upper threshold, 26% had turnover between 5 and 20 million Rands. Only 2% earned more than 21 but less than 50 million Rands in annual turnover.

Most of the firms had been in operation for many years. Only 11% had less than 5 years of operations, and this was significant since firms who have been in operations for many years are most likely to have adopted defined operating systems and are established in certain markets (Brierly, 2011).

Frequency of use of decision support systems in SMEs

To understand the frequency of use of decision support systems, respondents were asked to rate their usage of selected DSS techniques. A 5-point Likert Scale (1 = Never, 2 = Rarely, 3= Sometimes, 4 = Frequently and 5 = Very Frequently) was used to allow respondents to indicate their frequency of use. The DSS techniques were divided between long-run and short-run decisions. Summarized results are shown in Table 4.

Table 4: Descriptive statistics for decision-making systems

	Never	Rarely	Sometimes	Frequently	Very frequently	Mean	Standard Deviation
Short-run techniques							
Break-even analysis	6.7%	30.8%	36.5%	21.2%	4.8%	2.49	1.052
Stock control models	17.3%	26.0%	29.8%	24.0%	2.9%	2.69	1.107
Product profitability analysis	18.3%	28.8%	38.5%	12.5%	1.9%	2.51	0.995
Customer profitability analysis	30.4%	25.5%	25.5%	11.8%	6.9%	2.39	1.228
Long-run techniques							
Payback period	18.3%	19.2%	36.5%	17.3%	8.7%	2.79	1.188
Accounting rate of return	51.0%	38.5%	9.6%	1.0%	-	1.61	0.703
Net Present value	44.2%	41.3%	12.5%	1.9%	-	1.72	0.756
Internal rate of return	52.9%	31.7%	13.5%	1.9%	-	1.64	0.787

The results in table 2 reveal a low uptake of DSS techniques in SMEs in Cape Town. For short-term decision support systems, the mean ranged from 2.39 to 2.69 showing a very low usage of such techniques. Concerning the short-term DSS techniques, break-even analysis had a cumulative usage of 62.5% (36.5 + 21.2 + 4.8) with most of the users making use of the technique sometimes and only 4.8% using it very frequently. Mixed results were obtained for product profitability and customer profitability analysis. Customer profitability had the highest percentage of very frequent users (6.9 %) but at the same time the highest percentage of non-users (30.4%). There is a possibility of misunderstanding by SMEs on what constitutes this technique. The formal approach to customer profitability analysis involves considering costs and benefits

associated with particular customers and including this information in decision making (Pete and Cardos, 2014). SMEs might take an informal approach and casually evaluate their customers' costs and revenue streams. Overall, the general trend shows a serious lack of awareness or competence in the usage of these techniques commonly found in use elsewhere.

Long-term decision support systems except for the payback period were mostly rarely used. The payback period had a cumulative frequency of 62.5% (36.5 + 17.3 + 8.7) with the majority of users using it occasionally and a few using it very frequently. The reason might be the simplicity of using this technique compared to ARR, NPV, and IRR. NPV and IRR produced almost similar results. The possible explanation for this could be that the same users who use one of the techniques are also competent in using the other. Another explanation to non-usage of long-term DSS techniques might be the frequency of long-term financing and investing decisions making in SMEs. Fatoki (2012) observes that these techniques are often used once at the commencement of the business during feasibility studies.

Frequency of use of strategic management accounting techniques
The frequency of usage of strategic management accounting techniques was also surveyed. Respondents were asked to indicate their frequency of use of each SMA technique. The 5-point Likert scale was used with responses ranging from 'never' to 'very frequently'. Table 5 summarizes the results.

Table 5: Summary of strategic management accounting techniques usage

	Never	Rarely	Sometimes	Frequently	Very frequently	Mean	Standard Deviation
Target Costing	56.9%	35.3%	7.8%	-	-	1.51	0.641
Strategic costing	48.0%	38.0%	14.0%	-	-	1.66	0.714
Product life cycle costing	53.1%	37.8%	9.2%	-	-	1.56	0.659
Value chain analysis	49.0%	31.3%	12.5%	7.3%	-	1.78	0.931
Competitor position monitoring	50.0%	32.3%	12.5%	3.1%	2.1%	1.74	0.939
The balanced scorecard (BSC)	72.6%	18.9%	7.4%	1.1%	-	1.36	0.662

The overall results indicate the non-usage of almost all SMA techniques by SMEs in Cape Town. Value chain analysis was frequently used by 7.3% of the respondents with a mean of 1.78. This shows that the respondents most of them who had been in the business for more than 10 years had established supply chains and other modalities that add value to their businesses. The least used SMA was the balanced scorecard. 72.6% of the respondents indicated that they never used this technique, and only 1.1% used it frequently.

Discussion of Results
 This study aimed to investigate the use of DSS and SMA techniques by small manufacturing firms (SMEs) in the city of Cape Town. Results obtained showed a low usage of most of these techniques. These findings are consistent with Armitage *et al.* (2016) who reported non-usage of sophisticated management accounting techniques was prevalent in Canadian SMEs. 64% did not use target costing, 82% did not perform discounted cash flow analysis, and 91% did not implement BSC. Interviewees indicated that these techniques were too complex for their small companies and were not necessarily needed. Considering that this study was conducted in a developed economy even lower adoption rates are expected in the developing economies.

On the contrary, results from developing countries in the Asian continent seem to reflect a better uptake of DSS techniques. For instance, Ahmad (2017) reported a 48.5% response rate for frequent to very frequent users of break-even analysis compared to 26% for this study. Other studies also reflected average usage for break-even analysis in SMEs found in Thailand, Pakistan and Indonesia (Rufino, 2014 Ashfaq, Younas, Usman

& Hanif, 2014; Sunarni, 2013). Factors such as a high level of uncertainty and competition in this region might be responsible for their slightly higher adoption of DSS techniques. Ashfaq et al (2014), elaborates that the environment is extremely competitive in Pakistan and firms have to increase their product ranges. This view could hold in the region considering their uptake of DSS techniques.

SMA usage in SMEs in Cape Town for this study shows a non-adoption trend. The results validate the common argument in management accounting research that SMEs seldom adopt strategic management techniques. These results are consistent with results obtained elsewhere in Africa regardless of firm size. Ab216del Al and McLellan (2011) reports less than 2% usage rate for target costing, value chain analysis and ABC in Egyptian manufacturing firms. Okoli (2011) revealed that in Nigeria, SMEs did not make use of management accounting systems and also lacked proper accounting skills. There was a common dislike for figures. These results also highlight the perception of users on accounting techniques which affect their adoption of advanced management accounting techniques. Mbogo (2011) evaluated the managerial accounting skills of SMEs in Kenya. Importantly, the study noted that there was a positive link between strong managerial accounting skills and the success of the firm. However, this study was based on SMEs under incubation, and the results apply only to the population as such. In Zimbabwe, Nyathi, Nyoni, Nyoni, and Bonga (2018) surveyed SMEs in Harare and discovered that accounting information was not used in SMEs contributing to the high failure rate. The small sample size makes these results limited in application.

5. Summary and Conclusion

Management accounting advocates have stressed the importance of using advanced management techniques such as DSS and SMA in the decision making of a firm (Scarlet, 2009). This study investigated the frequency of usage of these tools by small manufacturing enterprises in the City of Cape Town. Based on a sample of 104 firms, results showed that there is generally non-adoption of DSS and SMA techniques by these firms. The absence of most of these techniques is a cause of concern since there are high rates of business failure amongst small businesses in South Africa. Arguably, the effectiveness and suitability of DSS and SMA techniques are debatable, but they are known to limited use often promotes business failure. Maziriri and Mapuranga (2017) questioned the suitability of most of the information for decision-making models provided by management accounting on South African SMEs. There is the need for DSS and SMA techniques that SMEs can adopt with ease. On the other hand, the lack of financial and accounting skills has been identified as a factor in the non- adoption of advanced management techniques by SMEs. Consequently, there is a need to investigate the adoption and non-adoption factors of advanced management accounting techniques in the South African context.

In light of the findings of the of this paper, the following recommendations can be made:
- There is a need to raise awareness of the importance of using advanced management accounting tools in aiding strategic decisions in small businesses. This can be achieved by incorporating some of the techniques relevant to the prevailing environment in the short business course curriculum.
- Department of Small Business Development (DSBD) can consult with management accounting scholars and design specific training material with simplified relevant DSS and SMA techniques which can be used by low skilled SMEs owners.
- These recommendations are aimed at improving the uptake of DSS and SMA techniques in SMEs. Further avenues for research on the subject include the formulation of frameworks that can be adopted by SMEs on the practical implementation of DSS and SMA techniques in their firms. Although this study makes a contribution to the management accounting body of knowledge by highlighting the types of DSS and SMA techniques being used by SMEs, the scope was limited to only this. In this manner this paper may be a base for further DSS and SMA technique analysis to explore relationships and other statistical analysis to gain a deeper understanding of this subject. Furthermore, the use of a mixed-method coupled with a multivariate regression analysis can also be explored to provide insights into the factors limiting the adoption of DSS and SMA techniques in SMEs in South Africa.

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Paper 18

Consumer purchase intention on food Private Label Brands (PLBs) in the Eastern Cape Province of South Africa

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Abstract: Historically, national brands have been the driving force behind innovation for retail products in South Africa. The emergence of major retail players, however, has brought about several changes in the retail business environment. This change, in particular, lies with the provision of in-store brands also known as private label brands (PLBs). While there is an upward trend in the PLBs in South Africa, their acceptance and use remains weak. In light of this, the purpose of this study is to examine which predetermined factors influence consumer intention to purchase PLBs of the main food South African retailers which are Shoprite, Checkers, Pick and Pay, Spar and Woolworths. Hypotheses were developed to explain the theoretical relationships among the variables. A sample of 515 consumers was drawn from the Eastern Cape Province in South Africa. All measurement scales demonstrated satisfactory reliability. The findings of the study reveal that consumer' perceived Sales promotion, Brand awareness, Physical risk, Financial risk, and Performance risk to be significant factors influencing consumer's intention to purchase PLBs of the five major South African retailers. No significant influence, however, was found between the perceived quality and the consumers' intention to purchase PLBs in the food category. These findings offer guidelines of the management and promotion of PLBs within the food retail sector.

Keywords: *Private-label brands (PLBs), Store brands, Consumer purchase intention, Food retailers*

1. Introduction

Private-label brands (PLBs), also known as in-store brands, have been extremely successful in the recent years (Geyskens *et al.*, 2018). Throughout the world, PLBs are growing faster than national or manufacturer brands (Beneke & Carter, 2015; Diallo, 2012) particular in the retail chain stores. This growth has also been evidenced in the food category (Kakkos *et al.*, 2015). This is because retailers are focusing on developing their own brands to enhance customer loyalty (Jayakrishnan *et al.*, 2016a. Wu *et al.* (2011) state that one of the causes for growth of PLBs is that retailers now want to commit themselves to promoting their brand image instead of the manufacturers, and in doing so, cutting costs. Modern retailers are continuously finding creative ways to enhance their competitive excellences in order to capture value from their consumers (Retnawati *et al.*, 2018). One of these creative and innovative ways to capture value from consumers is how retailers sell a number of their own store brands (Kumar, 2016).

According to do Vale *et al.* (2016), the relationship between PLBs and consumers' store loyalty is increasingly relevant for both retail practitioners and academics. PLBs contribute to higher margins, store traffic and consumer loyalty (Rossi *et al.*, 2015). In addition, through selling PLBs, retailers cut their distribution channels as they do not have to pay for the brands anymore (Kumar, 2016). However, while PLBs have shown an upward trend in South Africa (Nielsen, 2019) they still exhibit low penetration rates and are viewed as being inferior to national brands (Beneke & Carter, 2015). In the developing and emerging markets, the acceptance of these brands by consumers is not without reservation (Rahman & Soesilo, 2018). The adoption of PLBs in South Africa remains weak (Beneke *et al.*, 2013; Beneke, 2010). This is due to a multitude of factors including the perceived quality and value (Hsiao *et al.*, In Press; Rahman & Soesilo, 2018) which influences the trust levels (Rossi *et al.*, 2015). Consumers react differently to marketing mix efforts for manufacturer brand in comparison to efforts for a PLB (Abril & Sanchez, 2016).

The following research question is therefore posited: What are the core drivers of consumer purchase intention of PLBs of the five main South African food retailers within the Eastern Cape Province?

The research objective of this study is to examine predetermined factors that influence consumer intention to purchase PLBs of the main food South African retailers. These retailers are Shoprite, Checkers, Pick and Pay, Spar, and Woolworths. By focusing on PLBs, this research stresses the strategic importance and value of private brands for retailers (Lombart & Louis, 2016). The current study intends to advance the literature on PLBs. There appears to be a dearth of knowledge, particularly in South Africa as a developing economy, as to the way consumers assess and perceive private brands. Furthermore, novel to this area of research, the current study examines the main dimensions of perceived risk (physical risk, financial risk, and performance risk) as well as perceived price fairness as drivers of consumers' intention to purchase PLBs. Other antecedent factors examined are sales promotion, brand awareness, and perceived quality.

2. Conceptual Framework

Consumer purchase intention
Much attention in the marketing literature has been placed on consumer behaviour issues relating to branded products including perceived value, purchase intentions and loyalty to brands (Kakkos *et al.*, 2015). This has been necessitated by the fact that marketers and practitioners have considered consumer purchase intention to be one of the drivers of consumer loyalty (Kumar, 2016). That is, consumer purchase intention represents the possibility that consumers will plan or be willing to purchase a certain product or service in the future (Martins *et al.*, 2018; Wu *et al.*, 2011). Several other authors (Prentice *et al.*, 2019; Kumar, 2016) concur that consumer purchase intention is the desire of customers to shop again at the retail store for the second time or more. Consumers' purchase intention is an indicator for predicting purchase behaviour. Consumers' are more likely to make a purchase when their purchase intention is strong (Huang & Ge, 2019).

Two major seminal theories, Theory of Reasoned Action (TRA) and Theory of Planned Behaviour (TPB) of Ajzen and Fishbein (1980) and Ajzen (1985), respectively, are the major theoretical frameworks employed by many studies to examine the various forms of consumer behaviour towards various products. The TRA predicts purchase behaviour of an individual, which is an important factor to assess the individual's attitude toward that behaviour (Hussain *et al.*, 2016). The TPB posits that to predict an individual's behaviour, one needs to measure the person's behavioural intention. Choi and Johnson (2019) and Wu and Chen (2014) assert that an individual's behavioural intention is impacted by the person's attitude, subjective norm, and perceived behaviour control. All these factors work together to influence behavioural intention and actual behaviour.

Various researchers have identified determinants influence consumers' intention to purchase PLBs. For example, De and Singh (2017) identified price and quality as keys factors considered by consumers when making a purchasing decision. In addition, factors such as promotional offers (Beneke *et al.*, 2015), perceived risk (Glynn & Widjaja, 2015), brand awareness (Calvo-Porral & Lévy-Mangin, 2014). These predetermined factors will be elaborated on in the following sections.

Sales promotion: Sales promotions, or price promotions, are key marketing tools that are designed to stimulate quicker and greater purchases from consumers (Valette-Florence *et al.*, 2011). These tools are designed to influence the brand equity of the product or store (Buil *et al.*, 2013). According to Fong *et al.* (2015), sales promotions are also projected to influence purchase decisions as price information. Peng *et al.* (2018) contend that consumers are attracted to price discounts whilst being aware of time limitations as promotions are for limited time periods.

Bauner *et al.* (2019) indicate a relationship between promotion and purchase intention. For example, in their study investigating couponing strategies between national and private labels products, they found that consumers who are price sensitive are more inclined to search for and use coupons for the purchasing of PLBs. Mussol *et al.* (2018) also indicate a relationship between promotion and purchase intention. For example, in their study to develop in-store strategies and relational expression through sales promotion, they

state that sales promotion activates positives feeling towards a brand which leads to brand preference and ultimately purchase intention. Given this background, the following hypothesis is subjected to empirical testing in this study:

H[1]: There is a significant relationship between *Sales promotion* and *Consumer purchase intention* of PLBs.

Brand awareness: It is important to note that brand awareness has been linked to purchase intentions. This is because consumers prior to a purchase tend to extract from their memory products that they are aware of (Kakkos *et al.,* 2015). Consumers, who are familiar with a name of a logo of a product, tend to have high levels of trust towards that product or business and are able to make comparisons between products (Foroudi, 2019). Jamali and Khan (2018) describe brand awareness as the extent to which the consumer has information about a brand, product and product features offered by the business. It is through this information that consumers will be able to identify the brand or product they need to purchase (Rubio *et al.*, 2014). Consumers prefer brands that require little time and cognitive effort when assessing their intention to purchase (Tariq *et al.*, 2017). The responsibility of brand managers and marketers has been viewed to be that of removing uncertainties surrounding their brands they offer through advertising (ter Braak & Deleersnyder, 2018). In fact, advertising provides consumers with valuable information about a product offering which serve as a trigger action in making a purchase (Bambuer-Sache & Heinzle, 2017).

Several empirical studies provide for a positive relationship between brand awareness and consumer purchase intention. In their study on PLBs, Geyskens *et al.* (2018) found a positive relationship between advertising and consumer purchase intention. Advertising was one of the factors that lead to the success of the rebranding of the Jumbo PLBs (Geyskens *et al.*, 2018). Similarly, Shahid *et al.* (2017) as well as Rossi *et al.* (2015) report that consumers will make more informed economic decisions when they are informed about and familiar with a brand they consider to purchase. It is for these reasons that the following hypothesis is proposed for empirical testing:

H[2]: There is a significant relationship between *Brand awareness* and *Consumer purchase intention* of PLBs.

Perceived quality: Jayakrishnan *et al.* (2016b) define perceived quality as a consumer factor that has an important role in determining the purchase intentions on private labels. Lower income consumers are more likely to purchase manufacturer brands, which are more trusted by a lot more consumers owing to their high-quality levels (Beneke, 2010). If the perceived quality of the product is high then the purchase intention will also be high (Yousuf & Ahmed, 2015). Perceived quality also influences perceived value which is the consumer's overall assessment of the utility of a product (Choi & Kim, 2013). Yoon *et al.* (2014) went further by equating the perceived value to quality and price. Perceived value is seen as a balance between perceived benefits and perceived costs (Hsu & Lin, 2015). Walsh and Mitchell (2010) point out that a relationship between perceived value and purchase intention. For example, the researchers state that the higher the perceived quality of the product in terms of the quality dimension of perceived value, the more likely consumers will make a purchase.

PLBs were originally perceived to be of low quality when compared to manufacturer brands (Calvo-Porral & Lévy-Mangin, 2014). The quality of PLBs are getting now, however, is not different from those of the national brands (Retnawati *et al.*, 2018). In their study, Beneke *et al.* (2013) found a relationship between perceived quality and purchase intention. For example, they found that the perceived product quality and perceived product value are important determinants of purchase intention. That is, consumers use the perceived quality and the value to be derived from the product to evaluate their intention to purchase from either a PLB or national branded product. In a different study conducted by Das (2015), perceived quality largely contributes to consumer purchase intention as opposed to other factors such as price sensitivity. It is for these reasons that the following hypothesis is proposed for empirical testing:

H[3]: There is a significant relationship between *Perceived quality* and *Consumer purchase intention* of PLBs.

Perceived price fairness: According to Wu *et al.* (2011), consumers tend to use price as the judgement standard for purchasing. Chiang and Jang (2007) further state that the perceived price indicates the perceived quality of the product the consumer intends to purchase. That is, the higher the price the better the perceived quality of the product. Beneke and Carter (2015) contend that a difference exists between actual price and

perceived price and that a distinction must be made between the two. Consumers tend to evaluate the actual price of a product based on what they think the product is worth. They do this in order to determine the perceived price making a decision to purchase that product (Oosthuizen & Spowart, 2015). Perceived price, as a result, is the consumer's perception of the price of a product compared to that of competing brands.

Calvo-Porral and Levy-Mangin (2015) indicate a relationship between perceived price and purchase intention. In their study investigating the role of consumer trust on loyalty and purchase intention, for example, they state that the lower affordable price is appealing to consumers. They also add that consumers consider price to be the main purchase decision making factor. Cuneo *et al.* (2018) further affirm that price sensitive consumers are price conscious as they are experiencing financial constraints therefore they search for the lowest prices which in many cases are offered by PLBs. It is for these reasons that the following hypothesis is proposed for empirical testing in this study:
H[4]: There is a significant relationship between *Price fairness* and *Consumer purchase intention* of PLBs.

Perceived risk: According to Ariffin *et al.* (2018), perceived risk has a significant influence in determining consumer purchase intentions. It is argued that consumer's level of uncertainty regarding the outcome of a purchase decision is influenced by their perceived risk on products they intend to purchase (Kumar, 2016). When an individual feels that a product is risky, this may decrease his or her intention to purchase that product (Vo & Nguyen, 2015). Consumers perceive a high degree of risk when they decide to purchase unknown brands as they do not have experience with those brands (Bhukya & Singh, 2015). They then purchase brands whose functionality they are familiar with so as to avoid or reduce any kind of risk (Konuk, 2018).

From the literature, perceived risk has been considered as a multidimensional concept. Researchers (Ma'ruf *et al.*, 2019) have identified performance, time, social, physical, psychological, and financial risk as dimensions of perceived risks. Performance risk is concerned with the product not working or performing up to consumer's expected standards (Shapiro *et al.*, 2019). Time risk relates to the time spent by the consumer for the purchase of a product and the time wasted in case of a poor product choice (Ueltschy *et al.*, 2004). Social risk is described as the perceived judgment on the product purchased that creates dissatisfaction among family, friends and communities. It interprets society influences on the consumers' decision to purchase a product (Ariffin *et al.*, 2018). Physical risk relates to the safety and health of the consumers after using the product (Ueltschy *et al.*, 2004). Example of physical risks is related to health risks and includes diabetes, coronary heart diseases, and food allergy among others (Wilkinson *et al.*, 2004). Ariffin *et al.* (2018) describe psychological risk as the possible loss of self-respect caused by frustration of consumer's dissatisfaction in choosing a poor product. Lastly, financial risk is associated with the costs and uncertainty of purchasing an unpredictable product or service (Shapiro *et al.*, 2019, p. 238). Physical, performance, and financial risks have been found in the literature to be the most examined dimensions in previous studies (Konuk, 2018; Vo & Nguyen, 2015; Wu *et al.*, 2011) as they relate mostly to the price or money, quality and value that consumers derive from using a product. In this study, only three dimensions of perceived risk will be examined, physical, financial, and performance.

Many studies have highlighted perceived risk as one of the significant drivers of consumer purchase intention toward the PLBs. For example, the study of Rahman and Soesilo (2018) indicates a positive relationship between perceived risk and purchase intention. In their study (Rahman & Soesilo, 2018) on the effect of information exposure on consumer's perceived risk, perceived quality and intention to purchase, PLBs are regarded to have higher risks in terms of performance of the product and lower risk in terms of price and considered to be of inferior quality. Their study found that when consumers perceive a brand to be risky, it leads to a decrease in the likelihood of the consumer making a purchase intention. Similarly, Cuneo *et al.* (2018), in their study they concur that PLBs were perceived as more risky as compared to the manufacturer brands. As highlighted before, one of the reasons for these findings is that PLBs are perceived to be of lower quality than their counterparts (Sweeney & Soutar, 2001) which serves as a performance and physical risk to some consumers. Given this background, the following hypotheses are proposed for empirical testing in this study:
H[5a]: There is a significant relationship between *Physical risk* and *Consumer purchase intention* of PLBs.

H^{5b}: There is a significant relationship between *Financial risk* and *Consumer purchase intention* of PLBs.
H^{5c}: There is a significant relationship between *Performance risk* and *Consumer purchase intention* of PLBs.

3. Method

This study adopted a positivistic research paradigm and implemented a quantitative research approach which was deductive and cross-sectional in nature. Based on the discussion on the various factors influencing the purchase intention of PLBs, Figure 1 presents the proposed conceptual framework for the study and is subjected to be empirically tested.

Figure 1: Proposed conceptual framework
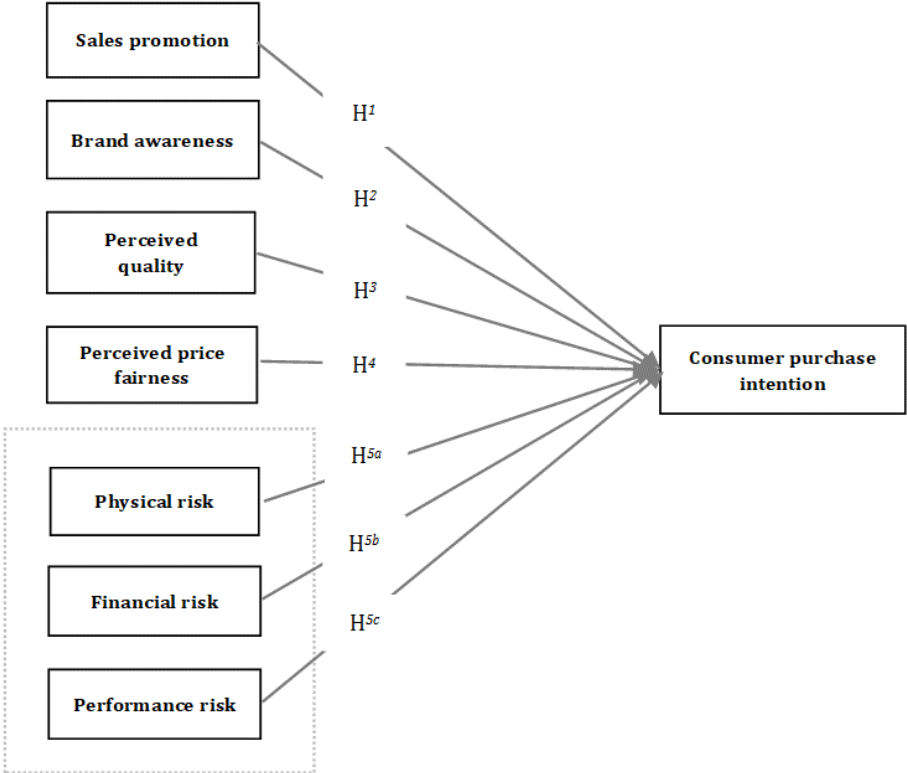
Research instrument
The data for this study was collected using a self-administered cross-sectional survey consisting of three sections. The first section included questions relating to the demographic information of the respondents. The second section solicited information relating to the factors influencing consumers' intention to purchase PLBs. The third section of the questionnaire included statements to measure the respondents' intention to purchase PLBs.

Consumer purchase intention: For the dependent variable, consumer purchase intention, 6 items were sourced and adapted from previous studies. This study adapted 2 items established by Knight and Kim (2007) to measure the consumer purchase intention of the PLB. Three items from Wu *et al*. (2011) and one item from Grewal *et al*. (1998) were also included in the consumer purchase intention scale. Consumer purchase intention was operationalised to mean having an intention and consideration to purchase PLBs from a food retail store.

Sales promotion: This study measured sales promotion using a 3-item scale. One item was sourced from Fong *et al.* (2015) and the other two were self-constructed items. For the purpose of this study, sale promotion refers to retailers' promotional offers such as price discounts and sale combos on the PLBs they provide.

Brand awareness: A 4-item scale was developed to measure brand awareness. Two items were sourced from the study of Jaafar *et al.* (2012), one item was sourced from the study of Vo and Nguyen (2015) and one item was self-constructed (I am aware of the private-brand labels in food retail stores). For the purpose of this study, brand awareness refers to the extent to which consumers are aware, familiarity, knowledgeable and recognise PLBs.

Perceived quality: This study measured perceived quality using a 7-item scale. Five items were sourced from Jaafar *et al.* (2012), one item was sourced from Wu *et al.* (2011) and Beneke (2010), and the other item was own-construct (*I put focus on quality when buying private-label product*). In this study, perceived quality is defined as the consumer's personal judgment about the PLBs products.

Price fairness: A 6-item scale was developed to measure perceived price fairness. Five items were sourced from Jaafar *et al.* (2012) and one item was sourced from Wu *et al.* (2011). For the purpose of the study, price fairness is defined as the consumer's perception of the PLBs products compared to other brands in the same product category.

Perceived risk: Perceived risk has been identified as consisting of 6 dimensions, however, this study uses the 3 main dimensions (financial risk, functional risk, and physiological risk) and the scale developed by Stone and Gronhaug (1993) for the measurement. Ten items encompassing these three dimensions were adapted to measure perceived risk of purchasing PLBs. Some of the items in these dimensions were reverse coded to reduce the potential concern of common method bias. Financial risk is the defined as the perceived possibility that the price of the product purchased is higher than its value, which may cause money loss (Wu *et al.*, 2011). Performance risk refers to the uncertainty that the performance of a purchased product will meet consumer's expectations (Beneke & Carter, 2015). Physical risk is defined as the possibility of the product being harmful to consumers' body when they purchase a faulty product (Wu *et al.*, 2011).

Ethical considerations
Several ethical considerations were taken into account in the administration of the measuring instrument. The researchers of the current study made sure that no harm would come to the respondents when attempting the research questionnaire. Respondents were not forced to partake in the current research and the research objectives were explained to them before the complete the questionnaires. Respondents were also informed that they could withdraw from the study at any time they wished so. Respondents were given assurance that their identities were not going to be mentioned or named in all the research activities.

Statistical analyses
The analysis of the data collected involved assessing the validity and reliability of the measuring instrument as well as using descriptive and inferential statistics. The software programme STATISTICA version 13 was used to conduct the statistical analyses. The validity of the research instrument was assessed through content and construct validity. Content validity is evidenced by explaining the methodology used to develop the research questionnaire. The process of developing the research questionnaire included examining the previous empirical and theoretical work of factors influencing consumer intention to purchase PLBs. Construct validity was assessed through exploratory factor analysis (EFA). That is, EFA was performed to test the uni-dimensionality of the research constructs so as to examine the degree to which the items are loading into the same concept (Al-Debei *et al.*, 2015). To assess EFA, three commonly used assumptions were followed (Hair *et al.*, 2014): the minimum eigenvalue for each factor to be one; considering the sample size, factor loadings of 0.40 for each item were considered as the threshold for retaining items to ensure greater confidence (Hair *et al.*, 2014); and Varimax raw rotation method was used since it is an effective approach that simplifies the interpretations of factors (Collis & Hussey, 2014). Items loaded onto more than one factor

were discarded and only factors with two or more items loading into them were considered for further statistical analysis. Eight factors were extracted explain 64.94 per cent of the variance in the data.

To assess the reliability of the measuring instrument, Cronbach's alpha coefficients (CAs) were calculated and coefficients of 0.70 (Hair *et al.*, 2014) or higher were regarded as providing sufficient evidence of reliable scales. While researchers generally consider coefficients above 0.7 to be satisfactory (Hair *et al.*, 2014; Bryman, 2012; Mustakallio *et al.*, 2002), in social sciences values as low as 0.5 are reported to be acceptable (Jha, 2011; Loewenthal, 2004). According to Streiner (2003), larger scales above 20 items tend to have satisfactory values of alpha even though they may have orthogonal dimensions. In this current study, the number of items for the constructs under investigation varies between 2 and 6 per scale. Thus, achieving higher or reasonable alpha values is therefore not a given (Messner, 2013). Satisfactory evidence of validity and reliability for scales measuring the independent and dependent variables in this study is thus provided (see Table 1).

Table 1: Validity and reliability results

Factor	Items*	Factor loadings	CAs
Sales promotion	3	Max – 0.821 Min – 0.699	0.730
Brand awareness	4	Max – 0.729 Min – 0.510	0.687
Perceived quality	2	Max – 0.806 Min – 0.795	0.603
Price fairness	3	Max – 0.846 Min – 0.737	0.772
Physical risk	3	Max – 0.870 Min – 0.719	0.798
Financial risk	3	Max – 0.762 Min – 0.731	0.922
Performance risk	4	Max – 0.752 Min – 0.682	0.827
Customer purchase intention	6	Max – 0.727 Min – 0.606	0.841

*See Annexure A for items used

4. Results

Sample description
The current study is quantitative in nature and it utilised a large sample aiming at testing hypotheses. The target population was consumers of food retailers in the Eastern Cape province of South Africa who were aged 18 years and older. To participate in the study, the respondents had to be consumers of one or more of the main South African retail stores such as Shoprite, Checkers, Pick & Pay, Spar, and Woolworths. The convenience sample comprised of 515 respondents of which 56.3 per cent were female and 43.7 per cent were male. Most (41.55%) of the respondents were between the ages of 20 and 29 years followed by 30 and 40 years (20.97%). The majority of the respondents (58.06%) indicated that they were single individuals with less family responsibilities. The majority (63.5%) of the respondents participating in this study were from the Black population group and 62.91% of the sample possesses a tertiary qualification. Most (43.50%) of the respondents indicated that their monthly household income level were at least R10 000 and about 18 per cent of the sample earn a household income between R5 000 and R10 000 per month. A more or less even number of respondents have also indicated that they frequently buy most their food products from Shoprite stores (31.26%) and Spar (26.80%), and all participants have a loyalty shopper's card from at least the largest food retailers: Shoprite, Checkers, Pick & Pay, Spar, and Woolworths.

Descriptive statistics and correlation coefficients

The sample data (see Table 3) was summarised by calculating descriptive statistics. The mean, standard deviation and frequency distributions were calculated in order to describe the sample. For the purpose of summarising the sample in the study, response categories on the 5-point Likert scale for both the dependent and independent variables were categorised as follows: responses from $1 \le \bar{x} < 2.5$ were categorised as disagree; $2.5 \le \bar{x} < 3.5$ categorised as neutral; and $3.5 \le \bar{x} \ge 5$ were categorised as agree.

From Table 2 it can be seen that mean scores of between 3.215 and 4.157 were reported by the participants for the factors investigated in this study. The majority of the respondents (58.45%) agreed that they had intentions to purchase PLBs of the five major South African food retailers. A great majority also agreed with the statements measuring Perceived quality. However, only 25.44 per cent of the respondents agreed that they get the worth of their money from purchasing PLBs.

Table 2: Descriptive statistics

Factor	Means	Std. dev.	Disagree%	Neutral%	Agree%
Sales promotion	3.652	0.835	6.41	23.50	70.10
Brand awareness	3.816	0.601	1.36	20.00	78.64
Perceived quality	4.157	0.680	0.97	8.93	90.10
Price fairness	3.392	0.882	15.34	39.61	45.05
Physical risk	3.632	0.829	9.90	27.38	62.72
Financial risk	3.215	0.465	5.44	69.13	25.44
Performance risk	3.469	0.746	8.74	35.34	55.92
Customer purchase intention	3.504	0.624	4.47	37.09	58.45

From Table 3 it can be seen that all independent variables were significantly ($p<0.05$) and positively correlated with the dependent variable, *Consumer purchase intention*. A strong positive association between *Performance risk* and *Consumer purchase intention* is reported in this study. In addition to these findings, significant positive associations were reported between all the independent variables except for *Sales promotion*, *Perceived quality*, *Financial risk* as well as *Perceived quality*, *Physical risk*, and *Performance risk*.

Table 3: Pearson's product moment correlations

Factor	1	2	3	4	5	6	7	8
Sales promotion	1.000	**0.254**	0.071	**0.195**	**0.131**	0.031	**0.134**	**0.245**
Awareness	**0.254**	1.000	**0.286**	**0.293**	**0.291**	**0.131**	**0.365**	**0.524**
Perceived quality	0.071	**0.286**	1.000	**0.098**	0.084	0.043	**0.150**	**0.216**
Price fairness	**0.195**	**0.293**	0.098	1.000	**0.097**	**0.204**	**0.160**	**0.276**
Physical risk	**0.131**	**0.291**	0.084	**0.097**	1.000	**0.135**	**0.434**	**0.402**
Financial risk	0.031	**0.131**	0.043	**0.204**	**0.135**	1.000	**0.117**	**0.189**
Performance risk	**0.134**	**0.365**	**0.150**	**0.160**	**0.434**	**0.117**	1.000	**0.568**
Consumer purchase intention	**0.245**	**0.524**	**0.216**	**0.276**	**0.402**	**0.189**	**0.568**	1.000

(**Bold** = p < 0.05)

Multiple regression analysis

Multiple regression analysis was conducted to identify significant causal link or impact of independent on dependent variables, that is, to test the hypotheses (Zikmund & Babin, 2013). Before undertaking the multiple regression analysis, concerns of multi-collinearity were addressed by calculating the variance inflation factors (VIF) for the predictor variables in the study and factors of less than 4 (O'Brien, 2007) were returned. Multi-collinearity was thus considered not a problem when estimating the multiple regression model in the current study.

Furthermore, to ensure that the results of a multiple regression analysis are valid, several assumptions must be met. These assumptions were tested by performing a residual analysis. Both the Cook's distance method

and the deleted residual method failed to identify any outliers or influential observations. The normal probability plot of the residuals only deviated somewhat from a straight line, but the normality assumption was confirmed by a histogram of the residuals. A Durbin-Watson d-value close to 2 (2.01238) was obtained indicating that no residual correlation was present. The residual variance for the independent variables appeared to be evenly distributed, indicating that the equal variance assumption was satisfied for these constructs.

Table 4: Influence of factors on consumer purchase intentions

Dependent variable: Consumer purchase intentions			R-square = 0.4770	
Independent variables	Beta	Std. Error	t-value	Sig.(p)
Intercept	0.0354	0.2121	0.1670	0.8674
Sales promotion	0.0630	0.0251	2.5106	0.0124**
Brand awareness	0.2930	0.0393	7.4587	0.0000*
Perceived quality	0.0474	0.0308	1.5384	0.1246
Price fairness	0.0610	0.0244	2.4995	0.0128**
Physical risk	0.0953	0.0273	3.4866	0.0005*
Financial risk	0.0930	0.0444	2.0957	0.0366**
Performance risk	0.3088	0.0312	9.9061	0.0000*

*$p < 0.001$; **$p < 0.05$

From Table 4 it can be seen that the independent variables investigated in the current study explain 47.70 per cent of the variance in the consumer's intention to purchase PLBs. Sales promotion (Beta = 0.0630; $p < 0.05$), Brand awareness (Beta = 0.2930; $p < 0.001$), Price fairness (Beta = 0.0610; $p < 0.05$), Physical risk (Beta = 0.0953; $p < 0.001$), Financial risk (Beta = 0.0930; $p < 0.05$), and Performance risk (Beta = 0.3088; $p < 0.001$) all exert a positive and significant influence on Consumer purchase intentions. Brand awareness and Performance risk exert the strongest influence on Consumer purchase intentions. No significant relationship emerged between Perceived quality and Consumer purchase intentions. Support is thus found for the hypothesised relationships between the Sales promotion (H[1]), Brand awareness (H[2]), Price fairness (H[4]), Physical risk (H[5a]), Financial risk (H[5b]), and Performance risk (H[5c]), and the Consumer purchase intentions of PLBs. However, support was not found for the hypothesised relationship between Perceived quality (H[3]) and the Consumer purchase intentions on PLBs.

5. Discussion and Managerial Implications

The primary objective of this study was to examine the predetermined factors that influence consumer's intention to purchase PLBs of the five major South African food retail stores. These retail stores are, namely: Shoprite, Checkers, Pick & Pay, Spar, and Woolworths. The results of this study indicated that consumers' perceived sales promotion, brand awareness, perceived quality, physical risk, and performance risk to be significant factors influencing consumer's intention to purchase PLBs of the five major South African retailers. This is in line with the literature which suggests that promotional offers (do Vale *et al.*, 2016), brand awareness (Mostafa & Elseidi, 2018), perceived quality (Olbrich *et al.*, 2017), perceived risk (Beneke & Carter, 2015) are key drivers of consumers' intention to purchase PLBs.

The findings of the study show that sales promotion has a significant positive influence of the consumers' intention to purchase PLBs. This then implies that the more a retail store offers promotional sales on their PLBs, the more consumers will mostly likely to purchase those brands. This finding is supported by the study of Fong *et al.* (2015) who also found significant relationship between sales promotion and consumer's intention to purchase PLBs. Based on this finding, it can be suggested that consumers of private branded products are encouraged and motivated to purchase store brands when they receive price discounts and sales promotional offers from the retailers. The findings of the study also show that the perceived Price fairness had a positive significant influence on the consumer's intention to purchase the PLBs. This implies that the more consumers perceive the price of the PLBs to be fair, the more likely they will purchase and patronise those products from the retailers. In fact, these results are consistent with the assumption that PLBs consumers are price-sensitive (Bauner *et al.*, 2019). Consumers purchase and patronise PLBs when they

perceive them to be reasonably cheaper than other competing brands. It appears that when buying PLBs, consumers aim to save money by looking for cheaper options.

The findings of the study indicate that brand awareness has a significant positive influence on the consumer's intention to purchase PLBs. This implies that the more consumers are aware of the PLBs provided by the retailers the more they are likely to purchase these brands. These results are supported by the study Mostafa and Elseidi (2018) who also found significant relationship between brand awareness and consumer's intention to purchase a product. According to Carsana and Jolibert (2018), consumers are more likely to purchase PLBs when they can recognise that brand among other competing brands. To ensure that consumers purchase and patronise PLBs, food retailers should create awareness about those products. Consumers should be familiar with and quick to recognise the symbol of logo of the PLBs (Carsana & Jolibert, 2018). The creation of consumer awareness on PLBs may be enabled by advertising and promoting these products on televisions, social media as well as retailer's catalogues.

In the current study, all dimensions of perceived risk, that is, physical risk, financial risk, and performance risk were also found to have a positive and significant influence on the consumer's intention to purchase PLBs. These findings are consistent with those of Diallo (2012) and Wu *et al.* (2011) who found that perceived financial risk provide PLBs with good quality and reliable performance safe for use to reduce performance risk and physical risk. All the dimensions of perceived risk will in turn increase consumer's intention to purchase PLBs products (Wu *et al.*, 2011). Based on these findings, it can be suggested that consumers search and purchase products that they perceive to be reliable and dependable. When purchasing PLBs, consumers intend to spend their money in a wise manner and would like to get benefit from the products they are purchasing. In order for retailers to create trust on their PLBs they need to offer products that are not harmful to the wellbeing of their consumers. Through providing PLBs that perform the way they are supposed to, consumers begin to trust such products. As highlighted by Sarantidou (2018), high levels of trust are considered to influence consumer's evaluation on whether to PLBs product or not.

Although an overwhelming majority of respondents agreed that quality is an important criterion when buying food products, the findings of the study suggest that the perceived quality had no significant influence on the consumer's intention to purchase PLBs the food retailers. While this finding concurs with that of Basha and Lal (2019) it also contradicts that of De and Singh (2017), who report that the product quality of PLBs will influence the consumer's intention to purchase these products. This finding is somewhat surprising, given that product quality is believed to influence the perceived value of the PLBs (Jayakrishnan *et al.,* 2016b; Beneke & Carter, 2015). One of the reasons why this finding contradicts that of De and Singh (2017) is because some authors have noted that there is no significant difference in terms of quality between the PLBs and the national brands (Retnawati *et al.*, 2018). In addition, this finding could be attributed to the fact that the nature of the sample in that the most of the consumers interviewed in the current study were less than 30 years of age, which makes them millennials. Most of the respondents in the current study have a monthly household income of less than R10 000.00. Millennials are considered to be price sensitive than older consumers and this may be influenced by the high levels of employment among the young adults. De and Singh (2017) argue that consumers who are price sensitive generally have less brand loyalty and they often look for promotional offers by the stores and do not consider quality of products.

Limitations of the Study
The present study exhibits several limitations that might provide direction for future research. There are several factors that influence the consumer purchase intention on PLBs. This study focuses only on selected factors namely: sales promotion, brand awareness, perceived quality, price fairness, physical risk, financial risk, and performance risk. Investigating other factors such as consumer attitude, brand reputation, and store image could provide deeper insights into the factors influencing consumer's intention to purchase PLBs. Methodologically, the sample was only drawn from the Eastern Cape Province using a convenience sampling method therefore the results of the study cannot be generalised to all consumers as a whole. Utilising consumers from all South African provinces would possibly have revealed more accurate perceptions on the intentions to purchase PLBs. In addition, in relation to the methodological choices, respondents were asked to indicate their perception on factors that could influence their intention to purchase PLBs. These perceptions

could have led to a degree of bias in the responses obtained in the study. In addition, while the current investigated consumers above 18 years, future research should focus on millennial perceptions on PLBs. According to Haq & Bonn (2018), millennials have a strong emotional attachment with their preferred brands. Finally, this research did not address a wide a range of different products from Shoprite, Checkers, Pick and Pay, Spar and Woolworths. Additional research should investigate other food and non-food products. Future research should look into different PLBs for example standard and premium PLBs. Despite these limitations, the findings are of interest in the field of PLBs as well as retailing.

Conclusion

Based on the findings of this study, it can be concluded that PLBs consumers are price-sensitive. Price sensitive consumers will consider incentives such as promotional offers deciding to purchase PLB products. While product quality is often regarded as one of the most important factors determining the consumer's intentions to purchase products, it is not always the case. Retailers must decide under what name to brand their private-labels. Brand differentiation is important to ensure the perceived image of PLB products. Increasing promotional offers to consumers who frequently purchase and patronise these in-house brands may entice more consumers to purchase PLBs. Retailers also need to ensure that the quality of PLBs are of high quality to cub competition from the national branded products. Constant monitoring of consumer needs as well as preferences is thus important for retailers to survive.

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Annexure A

Items Retained for Statistical Analysis

Consumer purchase intentions	
INTE1	I intend to buy private-label brands frequently
INTE2	I plan to buy private-label brands
INTE3	I like the private-label brands
INTE4	I am satisfied with most of the private-label brand I buy
INTE5	I feel good when I buy private-label brands
INTE6	I will consider to buy a private-label branded product
Sales promotion *	
PRO2	Price discounts are important to me
PRO3	Sales promotions influences my purchase intentions
Brand awareness *	
AWA1	I am aware of the private-label brands offered by food retailers
AWA2	Product familiarity motivates me to buy private-label branded products
AWA3	I have knowledge about private-label brands in the food retail stores
Perceived quality *	
QUAL2	I put more focus on quality when I buy private-label brands
QUAL6	I think quality is an important criterion for purchasing a product
Price fairness *	
PRIC4	I think the price is reasonable
PRIC5	I save money on private-label brands
PRIC6	I buy them because they are cheaper options
Physical risk	
RISK8	I think private-label brands will harm my body (**R**)
RISK9	I think private-label brands could lead to uncomfortable physical side-effects (**R**)
RISK10	I am concerned about potential physical risks associate with private-label products (**R**)
Financial risk	
RISK1	I think buying a private label brand is a bed way to spend money (**R**)
RISK2	I am concerned that my financial investment is not wise (**R**)
RISK3	I am concerned that I will not get money's worth from private-label brands (**R**)
Performance risk	
RISK4	Private-label brands are reliable and dependable to consume
RISK5	Private-label brands provide the expected level of benefits
RISK6	I have trust on private-label brands
RISK7	Private-label brands perform the way they supposed to

R = reversed items
**Some of the items were discarded due to poor validity

Paper 19

An enquiry into the management challenges of millennial employees within the hotel industry: A Case Study

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Abstract: This study sought to uncover the specific challenges hotel managers experience with Millennial employees, and to assess whether such challenges are based on any generational misunderstanding. Hotel managers' concerns about Millennials' needs and how to retain them are well placed as there are increasingly more of the Millennial generation being employed in hotels. Globally, retaining upskilled employees remains a challenge, and retention of upskilled Millennial employees may be particularly important. Emphasis was placed on face-to-face interviews using the qualitative research method and a purposive sampling technique. This study was undertaken in order to assess whether hotel managers have accurate assumptions about their Millennial employees. It explored the core values, expectations, drivers, motivations and influencers of change of Millennials working in the hotel industry in order to test the above assumptions. Having a better understanding of these factors is important for hotel managers seeking to improve engagement with their Millennial staff, to retain more Millennial employees and to improve their Millennial employees' performance. This study seeks to provide suggestions of how managers can engage with Millennial employees in affirmative ways so that the workplace is a positive experience for both hotel managers and Millennial employees.

Keywords*: Generations, leadership style, influencers, characteristics, Feedback, work environment*

1. Introduction

Millennials are not a myth - get over it! They differ from other generations in almost every regard.
The above quote by Twenge (2017) emphasize that when you were born affects your attitudes, values, and behaviours. Carter *et al.* (2013) encourage a work relationship between management and employees to support learning and organizational performance. Research has indicated that employees aged 18-32 have found it difficult to develop a work relationship with management, which is critical for job effectiveness (Akhras, 2015). Establishing an effective work relationship, is however at times challenging due to diverse generational characteristics and work values (Helyer & Lee, 2012; Okosi, 2017). Management needs to understand what affects Millennial work behaviour positively and negatively in order to establish a positive work relationship. Social implications arise when the interaction between management and Millennials is strained and as a consequence, affects productivity in the workplace. The significance of the study involves how management through understanding of Millennial management challenges, can improve the efficiency and productivity of Millennials in the Hotel Industry.

Conceptualisation

Knowing the age of your target audience can help you shape effective message.This information empowers you to craft a relevant message that draws a direct connection between individuals and how they relate to your brand (Knowles, 2017). Generation Y or "Millennials", were born between 1980-1994, Hershatter and Epstein (2010) noted that Millennials started to enter the workforce in 2004 and will continue to do so until 2022. According to Kahn and Louw (2016) the Millennial generation in South Africa was born between 1981-2000 which differs slightly from McCready (2011) who said that Millennials were born from 1981-1999. In contrast, according to Stein (2016) the Millennial generation is born between 1980-2000. Given the contrasting views albeit marginal, the article will focus on the population born between 1980-2000. They're characterized by self-exploration. Understanding the challenges that influence the efficiency and productivity of Millennials is critical for the effective leadership of Millennials (Rees, 2017). The Millennial generation is

the newest generation of employees to join the workforce, having entered the workforce in 2004 they will continue to do so until 2022 (Hershatter & Epstein, 2010). Millennials differ from previous generations quite significantly, in areas such as the use of technology (Hershatter & Epstein, 2010) the ability to multi-task (Lourenco & Cronan, 2017; Shaw & Fairhurst, 2008), the need for more constructive feedback (Hershatter & Epstein, 2010) and teamwork (Myers & Sadaghiani, 2010).

As the Millennial generation moved into the workforce, issues were raised pertaining to their perceived neediness, disloyalty, sense of entitlement and overall casualness to their work environment - both in the popular and academic media. Organizations have begun to pay attention to this, recognizing that managers from various generations are having trouble managing younger employees (Thompson & Gregory, 2012). Management per *sé* is the ability to get things done through utilizing people and coordinating work activities (Lazenby, 2015). Organizational management consists of organizational tasks, skills and roles; without these traits the effective management of an organization is impossible (Lazenby, 2015). Rees (2017) added that the type of manager-leader differs from organization to organization due to different operational challenges. For organizations to implement the most effective management-leadership style to increase the efficiency and productivity of Millennials, management should consider the importance of Millennials' contribution and involvement in decision-making. Also the importance of supervision and authority within the company to provide structure for the Millennial generation. A large percentage of this generation are not fully independent. Millennials are team-orientated and relationship building between employees should be encouraged, and finally acknowledgement the importance of new leadership traits within the organization. The corporate culture also needs to be revamped to ensure both the maximum retention of employees, as well as the progression of Millennials within the company (Zopiatis *et al.*, 2012).

Managing Millennials has become a problematic issue due to the fact that the mindset of a Millennial is very different to that of other generations that came before them (Hershatter & Epstein, 2010). It is important to note that employers need to establish a good relationship with their employees to ensure consistency and productivity in the work environment. Management plays an integral role with regard to ensuring that Millennials are motivated through recognition of their work (Anderson *et al.*, 2017). Millennials are focused on their personal career progression as well as their self-development according to Ng *et al.* (2010). A focus is the importance of management investing in the career and professional development of the Millennials as these are important for retaining them within the hospitality industry (Gursoy *et al.*, 2008; Ukeni & Reynolds, 2017). As such it is important to investigate the main factors influencing their working environment expectations. A survey that focused on South Africa's most attractive employers, produced the following results with regards to Millennial expectations of their working environment (Greve & Jacobs, 2017).

**Figure 1: Millennial expectations for work environment**

With the increasing number of Millennials entering the work environment, their priorities when considering employers are noticeably evolving towards organizations that allow for self-actualization and personal

fulfilment (Greve & Jacobs, 2017). This need has overtaken formerly critical job aspects such as leadership opportunities and remuneration. Firstly, the most important career goal for Millennials is a work-life balance – aiming to separate work from their private lives but this separation at times become blurry. Technology contributes to this since they are always connected. Secondly, this generation wants to be intellectually challenged as this gives them an opportunity to challenge themselves and contribute to the decision-making process. Thirdly, job security is important to sustain their work-life balance and support their families and lifestyle. Fourthly, the generation has shifted their emphasis towards work fulfilment. Millennials are increasingly drawn to organizations that presented themselves as working towards a larger purpose or vision, rather than exclusively focusing on bottom-line results. Prestigious organizations have decreased in attractiveness and Millennials would rather work for an organization that communicates its purpose. Fifth, as the millennial employee wants to be a manager/leader of people and is driven to achieve this in record time, organizations could invest in development programmes for Millennials to keep them engaged. Sixth, creativity, innovation and entrepreneurship are very important to this cohort and organizations could encourage this behaviour and benefit from it. Lastly, Millennials value an international career, so the possibility of this in future employment is regarded positively, plus this global employment has become more accessible through technology.

2. The Hotel Group within the SA Hospitality Industry

The hospitality industry is expanding both worldwide and also growing tremendously in South Africa. The tourism sector remains a fast growing industry in South Africa contributing 4.5% to total employment in 2016. A 14% growth in tourists from August 2015-August 2016 and 1 200 new hotel rooms in 2017 emphasize the competitive nature of the industry. An above average 20,000 new jobs were created since 2014 (Bizznews, 2017). The research case organization focus on one of the largest Hotels Group in South Africa. The Hotel Group emphasizes its focus on quality accommodation, friendly service and a homely ambience. The organization has grown and diversified its portfolio into five brands totaling over 7000 rooms and suites, ranking the Company among the 250 largest hotel chains in the world (CLHG, 2017). The Hotel Group primarily operates in the selected services hotel sector, and for the past thirty-three years has increased its footprint substantially to fifty-seven hotels (WallstreetWolves, 2018). The organization has expanded beyond the South African borders into Africa (CLHG, 2017), and has successfully enlarged its footprint in Botswana, Namibia and Kenya with two new hotels that opened in Mozambique and Tanzania by the end of 2018. The Hotel Group utilizes a lean staffing structure (CLHG, 2017) to reduce cost. In general, the reporting structure within a typical Hotel looks as follows:

Figure 2: Organogram of a typical hotel in the Company
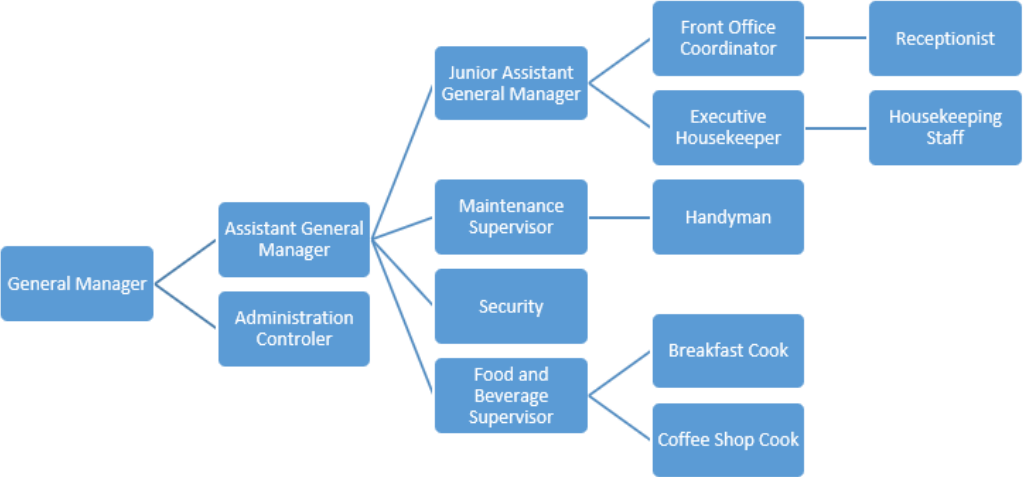
The lean organizational structure above have less management layers (Ingram, 2018) and the employees here tend to be more empowered and are expected to take responsibility daily to make decisions that would traditionally have been left to management. The Group's low cost and lean staff model combined with its

selected services offering is a great strength and competitive advantage over other hotels offering full-service selection (WallstreetWolves, 2018).

The most important quality within the hospitality industry is not the sales and marketing, infrastructure, strategy, automation or technology, it is customer service which acts as the industry's very soul. The hospitality industry's primary aim is to ensure that the customer is satisfied. This can only be achieved by ensuring that the employee is satisfied, as they will ultimately satisfy the potential customer (Ruetzler *et al.*, 2014). Exceptional service has always been an integral part of the hotel industry and strengthens the relationship with its guest which is vital in this industry. Service within hotels, especially in this competitive industry, goes beyond a smile and thank you - hotels need to create a dynamic and unforgettable experience for their guests (Soegjobs, 2016). As such the human factor of hospitality, represents a major component of a memorable experience that should be about enhancing the face-to-face customer service experience. Thus, the Hotel Group still values a personal approach despite having technology dominating the seamless customer experience (FutureFood, 2017). BizzCommunity (2017) also noted that "consumers continue to become more educated and discerning, and any business in the hospitality industry is well aware of the need for their employees to be professional and effective in the workplace, and to ensure that valued visitors receive the best possible service and experience" (Bizzcommunity, 2017).

Problem Statement

Stein (2016) stated that by the year 2025 the Millennial generation will make up 75% of the world's active working population. While it is important not to generalize, Millennials have shown that they possess characteristics and motivations that differ greatly from previous generations. Despite many research projects, uncertainty still exists regarding what the most effective form of management-leadership is that will enhance work place efficiencies within the Millennial generation (Chou, 2012). The problem being investigated is a perceived generational misunderstanding of Millennial employees within the case specific Hotel Group in South Africa. In this regard research like that of Murphy (2012) stated that the hospitality industry needs to adapt to a management-leadership style which will primarily focus on flexible work conditions for the Millennial and providing critical analytical feedback on their performance.

This generation has a lower level of work engagement than the previous generation and they require physical, psychological and emotional resources to remain engaged - should these be absent their intention to leave the company increases significantly (Park & Gursoy, 2012). Millennials will be the dominant generation in the Hotel Industry workforce by 2025. It is therefore imperative that management understands the different needs and wants of this generation over previous generations and adapts its work environment and management-leadership style to create a more conducive workplace. Understanding the work values of Millennials within the South African context could assist organizations in managing and retaining talent more effectively in an increasingly competitive business environment (Jonck *et al.*, 2017). The purpose of this case organization is to provide the Hotel management with a better understanding of Millennials, to create a more professional and effective workplace. In this regard Patel (2017) indicated organizations that are able to attract, retain and manage Millennials effectively will generally be more successful in the future, and these organizations will retain the top Millennial staff.

3. Research Methodology

A qualitative research approach was used for this study. Data was compiled by collecting information about the participants' knowledge, attitude, perceptions, beliefs and behaviour through semi-structured face-to-face interviews. The interview guide comprised five broad themes: theme 1 gathered demographic information, theme 2 explored perceptions of hierarchical structure and communication, theme 3 dealt with management-leadership styles, theme 4 investigated talent retention issues and concluded with theme 5 which explored what motivates Millennials – ultimately to form a better understanding of Millennial characteristics within the workplace.

Primary data was collected by means of face-to-face interviews conducted on 15 participants in the full-time employment of the City Lodge Hotel Group (born between 1980-2000). A purposive convenience sampling

technique was used in selecting the participants for the research. Interviews were conducted in an unbiased fashion with all questions asked in a consistent manner. All the questions put to the participants were open-ended with the aim of limiting yes or no answers as far as possible. Data analysis was completed on the ATLAS.ti programme in collaboration with a designated specialist at the North-West University (NWU) library. Interviews were recorded and on completion of each interview the researcher reviewed each recording and made additional notes before data from the interviews was transcribed. The software to be used for the coding is ATLAS.ti (Friese, 2016). Initially open coding was used to identify concepts, similarities and trends. Codes were then combined into code groups. Word cloud was populated with all the transcribed interview data and an excel spreadsheet was built containing a word count.

Reliability
The research is authentic as the interview format was developed by the issues raised by the extensive literature review and informed by a pilot study. The research was credible as it followed best practice and all participants were given the opportunity to voluntarily withdraw from the study, before or during the interview. The study is transferable as it will add to a social database for further research into the Millennial generation within the hotel industry. All the records were saved on ATLAS.ti suitcase for easy reference on a password protected computer and can be made available for auditing. The interviews questions were posed in the same manner to each of the participants, assisting being unbiased and objective to demonstrate the quality, validity and rigor of the research.

Data saturation
Saturation is achieved when the addition of new data provides no significant data that can be utilized to achieve the research objectives (Hennink *et al.*, 2017). Fusch and Ness (2015) refer to two main types of qualitative data saturations, namely meaning and code saturation. Fusch and Ness (2015) stated that as little as six data sets are required to reach meaning saturation, depending on the sample size. The fifteen semi-structured interviews conducted adhered to the code saturation criteria.

4. Research Findings

Interviews were based around five themed questions:

Theme 1 – Demographic information.
From the data set the following could be inferred:
- Of the fifteen participants 33.3% came from the 24-28 age group; 26.7% from the 29-33 age group and 20% of the participants from the age groups 18-23 and 34-38, respectively.
- Gender – 20% were male and 80% female.
- Regarding qualifications – all had at least grade 12: 20% of the participants have a National Diploma in Hospitality Management: 20% a Diploma in Hospitality Management, and 20% a Diploma in Front Office as their highest qualifications. In addition, 26.7% indicated having other qualifications such as a Certificate in Public Management and Bookkeeping, an Advanced Diploma in Front Office and a Food and Beverage Degree in Hospitality Management and a Diploma in Frontline Hospitality.
- The years of hospitality industry experience were quite varied with 26.6% indicating five years: 20% with three years and 13.3 % with 11 years of experience. The rest had one, four, six, seven, nine and fourteen years of experience respectively.
- The years of service with Hotel Group were similarly varied amongst participants, with 20% having 5 years and 3 years' service respectively, followed by 13.3% between one, four and eleven years of service respectively. The remaining 19.9% had seven years, eight years and three months of service with the Company.
- The positions within the Hotel Group were also very diverse. Most participants (46.7%) were employed as Receptionist/Night Audit, followed by Reservation staff (20%), and Assistant General Managers (13.3%). The remainder occupied positions such as Administrative Controller, Food and Beverage Supervisor and Front Office Coordinator (6.6% each).

A summary of the demographics is given in the following table:

Table 1: The profile of the respondents

Participant	Age	Gender	Highest Qualification	Industry Experience	Hotel Group	Position
MBACLHGM1	22	Female	National Diploma in Hospitality Management	5 years	1 year	Receptionist/Night Audit
MBACLHGM2	23	Male	Diploma in Frontline Hospitality	3 years	3 years	Receptionist/Night Audit
MBACLHGM3	33	Male	Matric	6 years	3 months	Receptionist/Night Audit
MBACLHGM4	27	Female	Advanced Diplomas in Front Office and Food and Beverage	5 years	5 years	Assistant General Manager
MBACLHGM5	34	Female	Diploma Front Office	11 years	11 years	Reservationist
MBACLHGM6	26	Male	Matric	3 years	3 years	Receptionist/Night Audit
MBACLHGM7	35	Female	Diploma Front Office	11 years	11 years	Front Office Coordinator
MBACLHGM8	28	Female	Diploma Front Office	5 years	5 years	Receptionist/Night Audit
MBACLHGM9	36	Female	National Diploma in Hospitality Management	14 years	4 years	Assistant General Manager
MBACLHGM10	28	Female	Diploma in Hospitality Management	4 years	4 years	Reservations
MBACLHGM11	33	Female	Certificate in Public Management and Bookkeeping	8 years	8 years	Admin Controller
MBACLHGM12	23	Female	Degree in Hospitality Management	1 year	1 year	Food and Beverage Supervisor
MBACLHGM13	29	Female	National Diploma in Hospitality Management	7 years	7 years	Reservations
MBACLHGM14	26	Female	Diploma in Hospitality Management	3 years	3 years	Receptionist/Night Audit
MBACLHGM15	31	Female	Diploma in Hospitality Management	5 years	5 years	Receptionist/Night Audit

No significant variation in perspective within the different age groups could be found. No remaining demographic finding such as gender, education, work experience, industry experience or position within the

Company distinguished itself as a determining factor. It can be deduced that aspects like age, work environment and historical events being the common denominators on which perceptions of the participants are based. This is in line with the definition of elements making up a generation (Kowske *et al.*, 2010).

Theme 2: Millennial perceptions, hierarchical structure and communication
- Hierarchical structure - scrutiny of hierarchical structure indicates that although participants value a personalized relationship and want management to listen to their ideas, 60% of participants regard management as their influencer of change, valuing their feedback and communication over that of colleagues. This showed that the participants still value a hierarchical structure, but with more access to and having their inputs valued by management.

Current communication effectiveness - the overall perception regarding communication within the Company was very positive. From the empirical responses it can be deduced that there are enough channels of communication within the Company. These currently comprise structured meetings, quick morning meetings, email messages, WhatsApp, handover books, telephonic and face-to-face communication - confirming this generation's need to utilize technology within the workplace. The use of social networks among the participants for work purposes was not seen as very important compared to other mentioned communications. This finding differs to the statement that management should support Millennials by providing them with access to social networks within the work environment (Mokoka, 2015).

The participants who found the communication to be ineffective noted a lack of structure and formality to the meetings and handovers. Participant MBACLHGM13 indicated that at times communication was lacking, with a break in communication between the sender and the receiver of the message. Another participant, MBACLHGM1, answered: "*I think it can be done in a better way because a lot of the times we have just a meeting with no form of no records or anything, so something needs to be done on paper to formalize the meeting*" (MBACLHGM1, 2018). Verbal handovers were also found to be unreliable, as instructions are easily misinterpreted from the original communication.
- Preferred method of communication with colleagues - the preferred method depends on the type of message that they need to get across. Email is the preferred method for Millennials (40%) because it alleviates any misunderstandings as an email is permanent and can be referred to at a later stage.

In general, communication was found to be effective. However, both better recording of and structure to meetings could be provided, and written communication, via email or a written handover document, could follow face-to-face meetings in order to eliminate confusion or incorrect information transfer. Face-to-face communication is the preferred method for 34% of this cohort as it is quicker than typing an email, and it gives the participant an opportunity to ask clarifying questions and ensure better understanding of the context of the message. In this regard MBACLHGM1 replied: "*So, work related must be on paper. It could be an email or just a memo but something in writing. And the other person must acknowledge they've received it*" (MBACLHGM1, 2018). The remainder of the participants preferred telephonic and hand-written documents. Only one participant mentioned the use of WhatsApp as a means of communication.
- Regarding the preferred method of communication when assigned a task, 69% agreed that email communication is the preferred method. Reasons include that the receiver acknowledges receipt, confusion is eliminated, and the email serves as a backup for the participant to refer to if necessary. Face-to-face communication is preferred by 31%, citing that it is quicker and allows for clarifying questions. A few responses indicated a combination of both verbal and written communication when assigned a task.

Participants' responses to preferred communication methods are almost identical for when they are assigned a task or when they communicate with their peers. However, when it comes to assigned tasks, an additional 39% value emails more than when communicating with their peers due to the need to establish a paper trail in case of a dispute. During the interviews it became clear that Hotel Millenials seemed to prefer emails to protect themselves from potential problems such as to prove that they did hand over communication, or that they had informed a colleague. Whilst face-to-face communication was considered the fastest, it should be followed up with some form of written communication to address any concerns that the sender might have.

The lack of preference in utilizing WhatsApp to communicate was interesting, since this generation is known for embracing technology.

Communicating feedback – in line with the reviewed literature as to the importance of feedback to Millennials (Behrens, 2009), 93% reported that this was important. MBACLHGM15 responded to the question: "*It is very important. I want to know because everyone wants to grow so I want to know how I am doing. Am I doing a good job or is something that is wrong that I'm doing. I need to know*" (MBACLHGM15, 2018). The consensus among the participants was that they value feedback as it gives them an opportunity to receive comment about their performance level.

An investigation of how often the participants required feedback indicated that 40% wanted feedback after every assigned task, with 20% wanting feedback monthly. The remaining 40% mentioned "*six months*", "*as necessary*", "*two weeks*" and "*weekly*". As to the method of receiving positive feedback, 87% of participants wanted to receive it face-to-face, with the remaining 13% indicating email as their preference. When receiving negative feedback 86% opted for face-to-face feedback, with 14% preferring email. Participants value both positive and negative feedback and it serves as a motivational tool, a finding that supports the literature stating that Millennials want frequent, positive and open communication in the workplace (Chou, 2012). Figure 3 provide the diverse responses to this issue.

Figure 3: Preferred Feedback (ATLAS.ti, 2018)
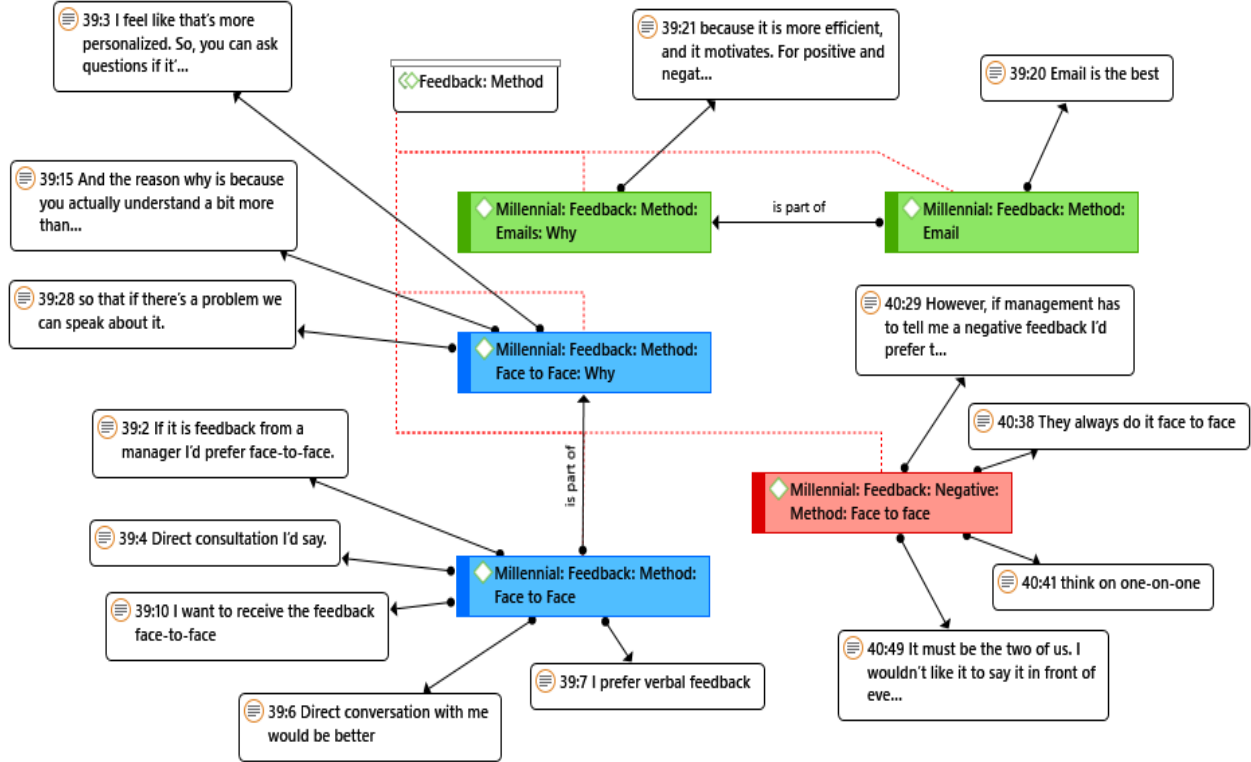
Feedback is also seen as a method of building a trust relationship with management and is an essential part of growth and development for participants. Both positive and negative feedback need to be communicated face-to-face, with management providing a private area within which to communicate negative feedback, so as not to embarrass a participant.

Theme 3: Management-leadership
The third theme investigated was participants' perception of the current management-leadership within their Company, and to discuss the positive and negative leadership characteristics present in their managers.

Overall the response to the current leadership within the Organization was positive, with 93% of participants indicating that they are happy. Participant MBACLHGM3, however, did not share the majorities' view on current management and said *"I don't think it's very strong because I've only been here for a short period of time. In fact, it's not short three months is too much, I've seen a lot. People are doing as they please. It should be stricter because there are rules and procedures of the establishment, but I don't think they are being followed"* (MBACLHGM3, 2018). Although the current management is tolerant of participants making mistakes, it depended on the severity of the transgression and the same mistakes not being repeated. Leaders that show commitment, integrity and honesty are also to be respected.

Leadership characteristics: Positive leadership characteristics (see the next table) mentioned were noticeably more focused towards supporting and guiding characteristics versus simply being competent in performing tasks. "*Lead by example*" was mentioned by ten of the participants as being the most important characteristic, followed by "*support*" from eight participants. In addition, communication, encouragement and management not micro-managing were the top characteristics mentioned by the participants. The remaining characteristics mentioned during the interview were *"guidance", "integrity", "ethical", "empathy", "approachability", "fair", "friendly", "honest"*, "*strict*" and "sy*mpathy*".

Table 2: Summary of positive management-leadership characteristics

	Characteristics		
Positive Leadership	Supportive (8)	Competent (2)	Fair (1)
	Communicates well (7)	Doesn't hold grudges (2)	Friendly (1)
	Encourages (5)	Leads by example (10)	Honest (1)
	Doesn't micro-manage (4)	Open to ideas (2)	Not ignorant (1)
	Delegates (3)	Vision (2)	Recognises performance (1)
	Guidance (3)	Accountable (1)	Strict (1)
	Integrity (3)	Approachable (1)	Sympathy (1)
		Empathy (1)	Teamwork (1)
		Ethical (1)	

Characteristics mentioned by the participants were compared to leadership styles and it was found that transformational leadership was the most prominent, followed by the servant- and democratic leadership styles. These findings are similar to literature findings where Long (2017:115) indicated that a leader should, in order to be effective in motivating their Millennial employees, practice one of the following three leadership styles: servant-, ethical- and transformational leadership. Whilst Long (2017:115) stated that servant leadership was most effective in motivating Millennials, followed by ethical leadership, the empirical data collected differed in this regard.

- The most noticeable negative characteristics mentioned by participants were "*micro-management*", "*lack of equality*" and a "*casual environment*". Table 3 provide a summary of the responses in this regard.

Table 3: Summary of negative leadership characteristics

Negative Leadership	**Characteristics**		
	Micro-manage (2)	Has favourites (1)	Manipulates (1)
	No equality (2)	Look down on employees (1)	Not leading by example (1)
	Disciplines in public (1)	Makes employees feel bad (1)	Not strict enough (1)
			Casual environment (2)

These negative characteristics hinder the transfer of knowledge to participants and consequently standing in the way of growth and development. Micro-management was also seen as a lack of trust by the participant's manager. MBACLHGM4's response was: *"And then the other one is whereby a GM does everything by himself/herself of which that one for me is not really the best because in that way you are not giving your team*

more things to do, there's no way that people can learn if you don't delegate" (MBACLHGM4, 2018)..
Participants, also stated that everybody should be treated equally, with no favouritism shown within the work environment. It is worth noting that participants did value a more structured working environment, and a lack of discipline at times causes them some concern.

Theme 4: Talent retention
Theme 4 concentrated on what would encourage Millennial talent to stay with a company for longer.
Regarding the question about what aspects Millennials value most, 55% indicated that they value family most
- MBACLHGM12 answered this by saying: "Definitely my family and my friends because if it weren't for them to support you and help you, then I don't think you will reach what you want to in life" (MBACLHG12, 2018).
This finding is similar to the literature - Millennials indicated a work-life balance to be the most important expectation. The second most important value in the participants' life was money. Reasons cited included that it was required for a "good life", money equals security and provides the means to look after family.
Participant MBACLHG7 answered "My work because it gives me bread, it gives me to pay my bills. It makes my life easier. Without work I won't be nobody, because you need something, you need money" (MBACLHGM7, 2018).

- From the responses relating to the Millennials' preference for recognition versus reward, 71% indicated that they prefer verbal recognition over reward. The remaining 21% indicated that they would prefer additional money to verbal recognition. Participants noted that simple comments like *"thank you"* and *"job well done"* are enough to motivate them to perform even better. Analysis indicates that verbal recognition is by far the preferred method of reward, but a properly implemented monetary reward system could provide additional motivation to achieve stretch objectives. This are illustrated in the following figure-

Figure 4: Preferences towards recognition or reward? (ATLAS.ti, 2018)
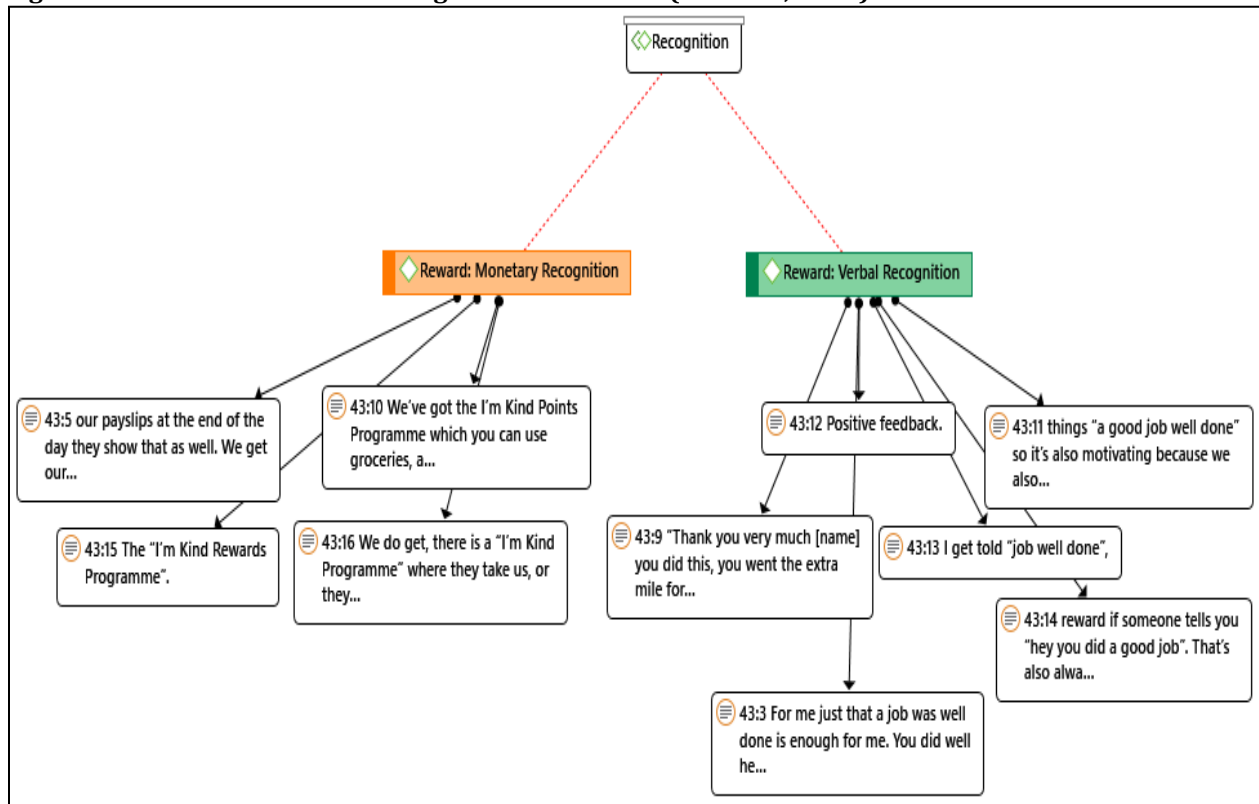
Millennials' preferred working environment? The participants mentioned the following stand-out words; *"team work"*, *"happy"*, *"greeting everyone"*, *"support"*, *"guidance"* and *"guest complaint free"*. Teamwork is

supported by the second highest preference, which is a happy working environment that is filled with loving, compassionate and caring people, where individuals are greeted in the mornings. This culture of happiness starts from the top and cascades down. One participant said that support and guidance are needed to reach organizational goals through respect, trust and empowerment of employees. The analysis of the responses from the various participants, made it clear that they value a working environment that is calm, relaxed, supportive and fun, with a caring culture.

International - should they be offered international exposure, 73% indicated that they would consider staying longer, whilst 27% stated that international exposure would have no bearing on them remaining within the Hotel Group. Participants who stated that they would consider staying longer noted that they value international exposure as it looks very good on their resume; plus, it offers them exposure to new cultures, new business environments, and potentially advancement in their careers. Literature supports this finding with Greve & Jacobs (2017) stating that the Millennials perceive value in international careers, as it is seen positively in respect to future employment opportunities. Participants who indicated that international exposure holds no bearing on retaining them indicated that they receive enough exposure locally and said that a stable job with benefits locally is more important. In general, the participants acknowledge that international exposure is important to them and could provide them with the necessary incentive to remain with the Organization for longer.

Theme 5: Motivation, influencers and challenges – the following responses were analysed:
Motivation within the work environment - participants indicated that they are motivated by feedback, a healthy work environment, money and support. Recognition of performance by means of face-to-face feedback was noted as the most important motivation. Receiving feedback and communication were common trends throughout the study, aligning with Millennials wanting to receive feedback to further grow and develop within their company.

A healthy work environment was next in importance, with one participant noting the importance of wanting to feel appreciated, respected, acknowledged for the good they do, and not feel that they are being judged. The importance of money as a motivator was raised, with mention that a "good life" or "money" plays an important role in motivating as it provides the participants with the means to support their families and live good lives.

The final motivation mentioned was support - it ties in with the number one motivator of feedback, as both are seen by participants as essential for them to grow. Millennials need regular feedback and support in an environment that they deem healthy. Figure 5 illustrate the aspects pertaining to the preferred working environment of Millenials:

Figure 5: Summary of preferred working environment of Millennials

Acknowledgement of their achievements was seen by participants as driving them to want to do even better. Career advancement was also mentioned as a driver as it provides them with additional money and status. For one participant, a clear vision and ambition as a driving force were expressed in terms of how important it is for a person to know what they want to achieve, and then working towards that goal. The importance of family and the participants' desire to achieve success in their work life and be able to provide a better life for their family are also emphasized. Accordingly, Millennials are driven towards improving the quality of life for themselves and their families. The next figure illustrates a summary of the drivers.

Figure 6: Summary of the perceived Millennial driving forces
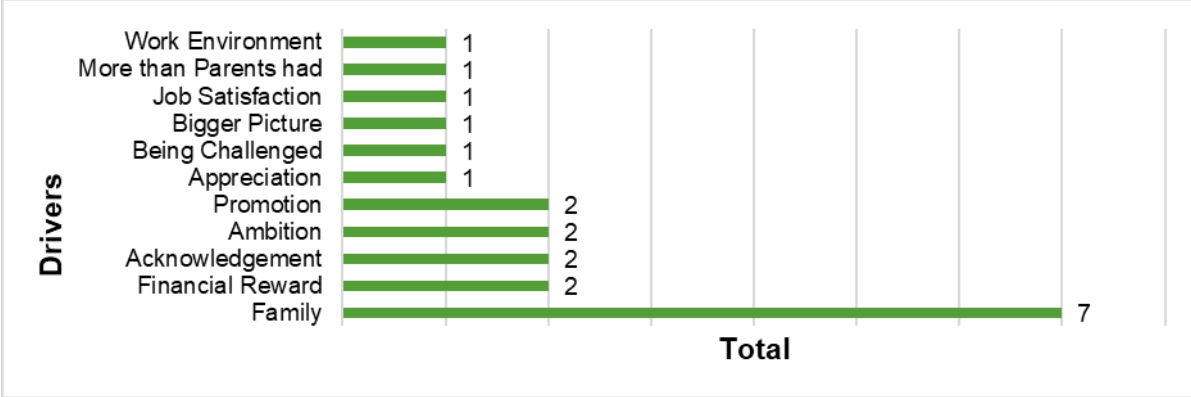
Influencer of change in the work environment - 60% percent of participants indicated that management plays the biggest role in influencing change within the work environment. They serve as an example to employees because of their commitment and dedication to the employees and the Company. Other influencers of change mentioned during the interviews are illustrated in the next figure:

Figure 7: Perception regarding influencer of change within working environment
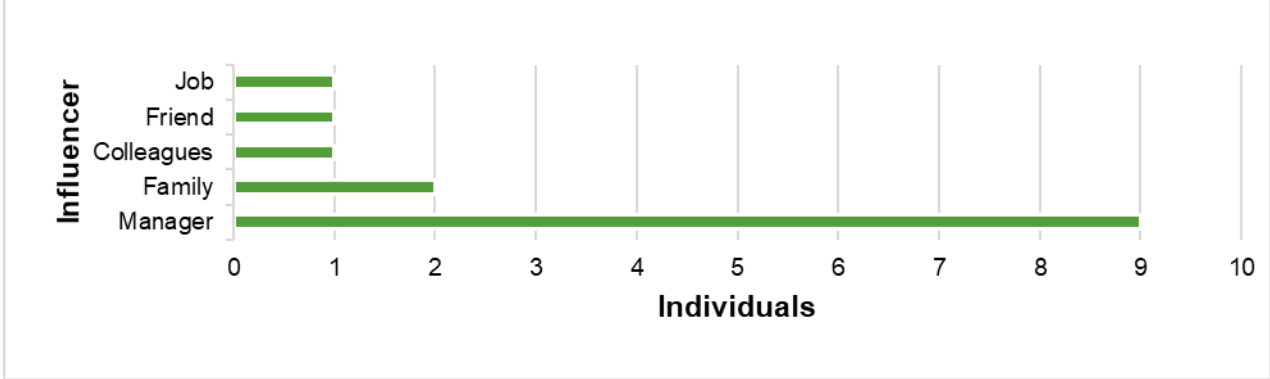
A need for very personalized relationships between the participants and management were identified. Connection with, and people investment from management, influences the participants to want to achieve more. Millennials' best attributes: according to the respondents the best attributes that they have are honesty, people skills, positivity, approachability and communication. Honesty ranked the highest with all and people skills came in second, with the third positivity, approachability and communication. In general, the participants refer to attributes that are essential for building effective relationships which reinforce the need that this generation must connect with people.

Millennials' worst attributes: according to the respondents, were impatience, being emotional, angry and anxious. Participants also felt that they get too emotionally involved and should at times distance themselves from a situation. They also expressed concern over having anger, anxiety and a sense of panic in the work environment - MBACLHGM7 said: *"The worst that I have to – I need to work on my anger management. I'm a very impatient person. And I have this anxiety which I need to work through anxiety attacks, like I'm in a panic mode"* (MBACLHG7, 2018). Participants are impatient when it comes to promotions, and they want to move up the corporate ladder quickly. They tend to get emotionally involved and this, at times, could be problematic for them. Anger, anxiety and panic were a real concern for participants, all of which are amplified in situations where they are uncertain about what to do, under pressure due to deadlines or simply lack emotional intelligence, support and guidance from management.

Millennial challenges - the biggest challenge they faced was change, such as exposure to an unknown like rolling out a new operating system, starting a new position, having to learn new skills or being assigned a new task by management. The second greatest challenge was being assigned a new task, having difficulty learning a new job, or not having the necessary support to complete a task successfully. Participant MBACLHG4 noted that this cause pressure, however, add time constraints and it becomes a greater challenge. MBACLHGM4 (2018) stated that: *"a new position does give me a bit of a challenge. And pressure, when I'm under pressure I feel very challenged"* (MBACLH4, 2018). In general, these are all situations of uncertainty, change, new tasks and learning new skills. These uncertainties cause Millennials to feel pressured and amplify this generation's worst attributes; anger, anxiety and panic.

Effective management-leadership characteristics - An effective leader is someone who leads by example and sets the standard for operations and services within an organization. A leader should be approachable and listen to what the employees have to say, an effective leader needs to delegate responsibilities and not micro-manage, which promotes knowledge and growth. Feedback is essential for employees to understand whether they are performing well or not. Acknowledgement of the employee's performance is important to motivate and encourage them. What Millennials want in an effective leader is a person who is strong enough to lead by

example, an approachable person who is willing to listen to others' ideas before making decisions that affects everyone, a person willing to trust the employees enough not to micro-manage, and the ability to transfer knowledge and skills to the Millennial generation while providing them with the necessary support to succeed both in their personal and work life. Building a personal relationship on trust and respect, is of utmost importance to the Millennial generation. Figure 8 illustrate these characteristics.

Figure 8: Millennial perception of an effective leader's characteristics
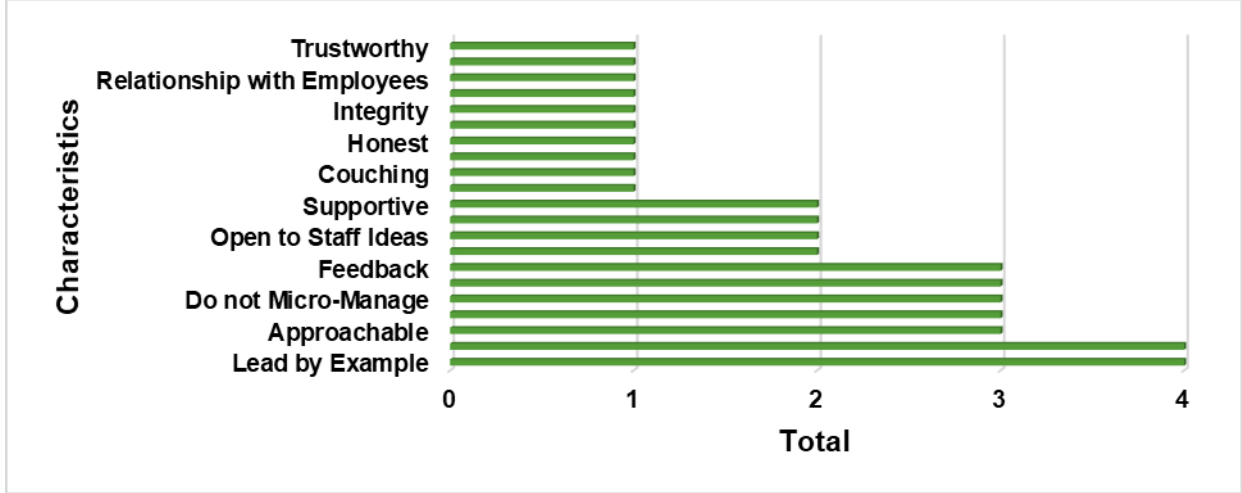
5. Conclusion and Recommendations

The primary objective of the study was to explore the challenges management face within the hotel industry while managing their Millennial workforce. The problem is the view held of a generational misunderstanding faced by management of Millennial employees within the industry. This research added to the existing limited body of knowledge of Millennial employees within the hotel industry in South Africa. The research gave management insight into the Millennials perception of hierarchical structures within the organization, how to effectively communicate with this generation in order to create a personalized relationship that will motivate, support and create trust in the working relationship. The study also provided clarity on the ideal work environment, what motivates them, the influencers of change, the preferred management-leadership style, what drives this generation to perform better and how to retain the Millennial talent. Through understanding this generation better management can adapt their management process to accommodate and create a more conducive working environment.

Conventional management processes need to be amended for this generation as management should allow unprecedented access to themselves as they require continuous feedback, support, mentorship and coaching. Millennials want to be involved and feel that management values their contribution. Millennial hotel employees value a highly personalized relationship with their managers and they want to be able to trust that their managers have their best interest at heart both professionally and personally. Some of the main findings of the empirical investigation show that the most preferred management-leadership style of Millennial employees is transformational leadership, followed in turn by servant- and democratic leadership. These styles offer them the support, guidance and direction they need to further themselves in the workplace. They value a work-life balance as their families are very important to them. Remuneration is also very important to them as they need money to support both their lifestyle and their families. Supportive management is the foundation upon which they thrive within the industry and through this they can be further developed and promoted. In order to retain Millennial talent in the Hotel Group, the following findings pertaining to the working environment are highlighted - enhancing of the work-life balance; verbal and financial recognition, a happy environment and the value of international exposure.

The empirical findings also indicated that Millennials need recognition for their achievements, leadership and skills development opportunities must be created, they avoid micro-management, like to be involved in decision making, a work environment where time spent in the office is not regarded as an indication of their commitment. In terms of hierarchical structures, Millennials prefer a formal structure, but where they are treated as individuals, trusted, developed and guided and are encouraged to contribute meaningfully to their work environment. When management freely shares their knowledge, and give them direction, the organization is more likely to retain these employees.

Whilst face-to-face communication was considered the fastest, it should be followed up with some form of written communication to alleviate any concerns for the sender or receiver. Email communication was generally preferred for this reason, as well as from a safety point of view. Surprisingly, the lack of preference in utilizing WhatsApp to communicate was acknowledged, since this generation embrace technology. Regarding feedback, participants value this as it serves as a motivational tool irrespective of whether the feedback is positive or negative. Feedback is seen as a means of improving, and a way to upgrade themselves to a better paying position. Respect was not merely given due to age or position; rather leaders that showed commitment, integrity and honesty, as well as respect for their colleagues, were to be respected in turn. Connected to this was the value placed on being trusted by their managers. This generation is driven to becoming leaders themselves, and organizations should investigate developing and providing leadership development programmes from an early stage of their employment.

The hotel industry should therefore change their perceptions on dealing with the challenges of managing Millennial employees, through implementing the recommendations mentioned within the study, to better and more effectively manage this generation. This, however, is a two-way street and Millennials should also take the time to better understand the other generations and determine the benefits in their styles of working. Shouldn't the issue rather be how cultural changes affect relationships and how the generations can collaborate to understand each other? Through understanding the various generations organizations can, for increased business success, begin the process of bridging the gap. This also require a mind-set change and implement procedures to accommodate the Millennial generation.

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Paper 20

Engineering a manager: assessing the factors affecting the career transition

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Abstract: The appointment to a managerial position brings with it various managerial challenges to the engineer in transition. This research explored the factors that influenced the transition from engineer to managerial positions in the South African labor market. The influencing factors on the transition are seen to be any aspect that could influence the efficiency and success of the transition process. By identifying these factors, it will be possible for individuals and organizations in the industry to gain an understanding of what transitioning engineers experience and how to improve efficiency of the transition. This research was performed from a retrospective view by successful managers in the industry. A qualitative research approach was used and twelve engineers from diverse sectors in the economy were interviewed through the use of a semi-structured interview guide. The data was audio recorded, field notes were made and the recordings were transcribed. The data was analyzed on MaxQDA by using codes, code groups and themes. The findings showed that there are various influencing factors both from internal as well as environmental sources. These factors were divided into difficulty factors, transition drivers and expectations as seen by the industry. The research found that the factors were not sector-specific as the overall population had overlapping perceptions of these factors. The research identified factors that could serve individuals and organizations in adequately preparing for the transition to management through training and environmental control through career development structures. Although some organizations do have these processes the view of the respondents was still aligned on these matters and could serve to optimize their development. The research was concluded with corresponding recommendations.

Keywords: *Success factors, transition, engineer, management, influences, managerial roles.*

1. Introduction

"A full 24 of the 100 best-performing CEOs have a Bachelor's or Master's degree in engineering." (Baer, 2014)
The appointment to a managerial position brings with it various managerial challenges. It is not long before the realization of unpreparedness occurs and leads to an attempt to obtain any form of literature or guidance from peers to assist with this transition just to find out that their experience held the same reality. Engineering is one of the most seen careers among managerial positions. A research found that 33% of the S&P 500 CEO's have engineering degrees (Aquino, 2011). The Engineering Council of South Africa have further conducted a research that shows that 36% of engineers are in management roles (ECSA, 2013). Roles such as General Manager, Technical Director, Managing Director and Chief Operating Officer have all been seen to be filled by engineers to name a few but there is little understanding of the hardships experienced in this career transition.

Successful management is a term used to describe a present-day concept which could be viewed as a reason why some organizations survive while others thrive (Hellriegel *et al.*, 2012). However, engineers are often not aware of what being a manager is about and most are left to their own devices in this transition. They are often expected to make the transition without any preparation or typical 'know-how'. This leaves them coming up short as their focus normally concentrates on technical aspects in their early career and only a few organizations supply the necessary managerial training or transition support (Custovic, 2016).

2. Literature Review

"...engineering has long been ranked as the most common undergraduate degree among Fortune 500 CEOs."
(Tzortzaki, 2014).

Formal training of engineers

Engineering is divided into a wide range of different fields. The definition in the South African context is that engineering is the practice of science, engineering science and technology concerned with the solution of problems of economic importance and those essential to the progress of society. Solutions are reliant on basic scientific, mathematical and engineering knowledge (ECSA, 2018). To become an engineer there are two routes that can be followed when considering the core disciplines within engineering namely mechanical, civil, chemical and electrical. The first route is the educational route (a degree in engineering) from an institution such as an University or a University of Technology. The degrees according to the Engineering Council of South Africa can be either a recognised or an accredited degree. The second option is an apprenticeship that sees one operating in a certain work environment while experience to become an engineer completing technical levels in either application or theory to a certain educational level. In the case of this route a candidate is required to have an educational level of an accredited national diploma. The experience needs to be at least ten years at a level of competence of a professional engineer and will be judged by the council (ECSA, 2018). It needs to be noted that there are two levels of engineering in practice that are considered, namely engineer and technologist.

The formal training for both of these are the completion of a certain level of technical understanding and practical experience to be considered for the next level in the career development which is the professional registration as an engineer. This is possible after four years of practical experience as an engineer and is done through interview and report submissions to indicate the required level of competence in the field as well as sound judgement in application (Engineering Chamber, 2015).

Career development

In the literature review many career development theory models are identified – see Maree (2018). None of the many different career theories encompasses the entire description of the career development field. The categorizing of career development theory has the following categories (CareersNZ, 2018):

- Theory of process – This relates to interaction and change as seen over time. This typically reflects stages and levels that an individual goes through.
- Theory of content – The context that an individual life in and his characteristics play the biggest role. His decisions are either driven by conditions or intrinsically.
- Theory of content and process – This aspect combines individual characteristics, their context and the interaction that takes place between them.
- Wider Explanations **–** This theory is aimed at taking the influences of less represented groups based on socioeconomic status, women, racial and ethnic groups and other such as lesbians, gay men, bisexual and transgendered individuals and people with disabilities into account.
- Social Constructionist Approaches – New theories have emerged that reflect an influence of the constructivist worldview that emphasizes a holism as well as the individual as a central influencer to the construction of their lives and careers.

For each of these categories there are numerous theories. For the purpose of the research, the focus was not on the many career development models, but precisely to gather primary data from engineers who went the way of engineer to manager. The history of career development theory is briefly summarized in the table below

Table 1: Summary of the history of career development theory

Time:	Theory:	Names:	Discription
1900's	Person-environment fit, trait factor	Parsons, Williamson, Holland	Vocational guidance is accomplished first by studying the individual, then by surveying occupations, and finally by matching the individual with the occupation.
1950's	Developmental	Ginzberg & Associates, Tiedman, Super, Gottfredson, Roe	Career development is a process that takes place over the life span. Career development activities should be designed to meet the needs of individuals at all stages of life.
1960's	Client-centred	Rogers	Career development is focused on the nature of the relationship between the helper and client. It encompasses the core conditions of unconditional positive regards, genuineness, congruence and empathy.
1970's	Social learning	Krumboltz	The individual's unique learning experiences over their lifespan develop primary influences that lead to career choice.
1980's	Post-modern	Kelly, Cochran, Jepsen	Truth is discovered subjectively through dialogue rather than through objective testing. This approach emphasises the individual's experience and decision making through exploring personal constructs and the client's narrative about their life.
1990's	Neuro-linguistic programming	Richard Bandler, John Grinder	A way of coding thinking, language and behaviour based on the principle that changing the way one thinks can change behaviour.
1990's	Happenstance	John Krumboltz	Chance events play a role in every career. The goal for clients is to generate beneficial chance events and have the ability to take advantage of them.
1990's	Narrative therapy	Michael White and David Epston, Gregory Bateson	Clients are encouraged to separate themselves from their problems (ie, the problem becomes external). The client makes sense of their experiences by using stories.
1990's	Te Whare Tapa Whā	Dr. Mason Durie	Māori health is a balance between four interacting dimensions: te taha wairua (the spiritual side); te taha hinengaro (thoughts and feelings); te taha tinana (the physical side) and te taha whānau (family).
2000's	Coaching		A model of practice. All parts of the client's life are taken into account through regular sessions

Career development is important as it analyze the process an individual work identity is formed throughout their lives and understanding why they make the decisions they do (Chism, 2018). What draws individuals to certain positions and towards achieving success can be an effective tool in goal planning (Uhlig, 2017). Career development is an ongoing process that consists of experiences from looking, obtaining and interpreting information about oneself and the situation you find yourself in. Career development can then be seen as a process of determining where one fit in to the working environment and why.

A simplified engineering career path can be seen in the diagram below:

**Figure 1: Engineering career path (Wilde, 2009)**
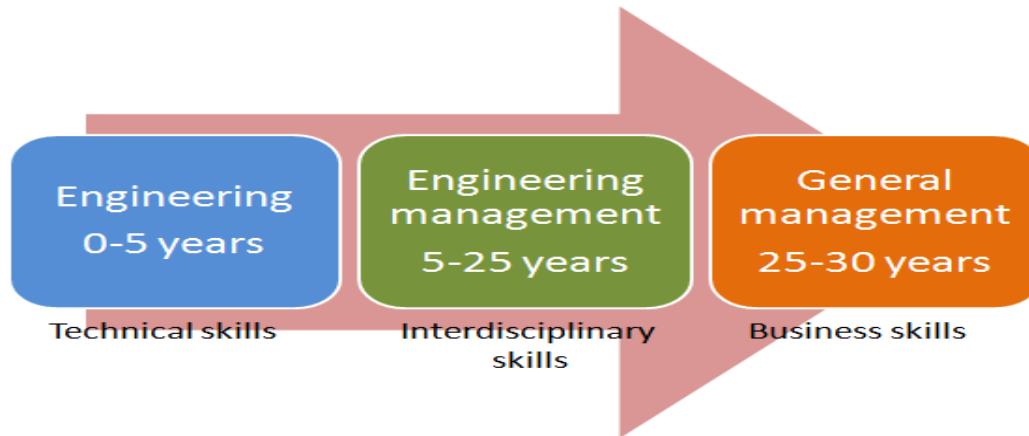
This change in career lifecycle goes with its own difficulties, one of which is the incumbent managerial positions that engineers are due to experience in their lifetime. The effect thereof will be looked at in more detail in this research.

Career transition
Career transition is the core phase and central to this research with numerous research material available on how managers influence the daily activities of organizations and the mentality of the people working below them. Transitions to management being established as a risk, the needed insight into this will be briefly explored before the empirical investigation. The difference between change and transition is that change happens without people transitioning and is situational and transition is psychological and the acceptance of the new situation forms part of it. The transition in this research will then be seen as the phase of changing from engineer to manager encompassing the change and the time frame. This takes place in two sections, first the change of title and then the change in duties (Fenwick, 2013). The process of transition is different for every situation but the basic aspects need to be known. The three core phases (Loli, 2016) of job market transitions are identified and illustrated below.

The ending phase comes with the realization of change. Excitement, worry, grief and detachment and the "letting go" of what is known is the focus here. The neutral phase consists of leaving your old position, routines and habits behind but not yet being established in the new allocation. The purgatory scenario of what 'was' and what 'is' and the high risk uncertainty zone creates concern and breaks confidence.
The establishment and settling in your new "state" announce the new beginning phase.

Figure 2: Bridges transition model (Fenwick, 2013)
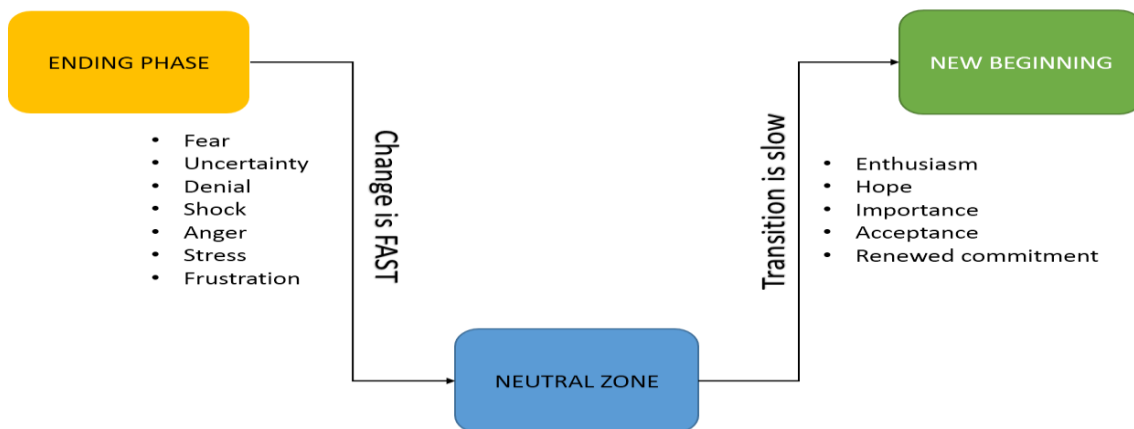
Problem Statement

This research will aim to form part of a larger more encompassing research of which the outcome will be the improved management of the transition phase from engineer to managerial level. This will include the identification of critical factors in the transition period, how to prepare for this transition through steering your career development and how to manage the transition to have the best possibility for success. In a typical working environment, once a person has become good at his work or is seen as influential in his role, a promotion is imminent. In the case of the engineering profession, engineers are seen to take up more responsibility in the form of managerial roles. There are few grey haired engineers around with most moving in to management positions at some stage (Kaydee, 2015).

In the transition to management many engineers find themselves unprepared for the management of people and the lack of guidance forced to determine what is expected of them and what management entails on the go. This change is difficult for any person but especially hard on engineers and people with strong technical skills (Manketelow *et al.*, 2017). The success of the transition could also affect organizations by losses in time as the new manager tries to settle in his new position. Not all great engineers make great managers and not knowing what is expected of them could see them be driven by either excitement or fear and could react in a wide range of ways that could have an impact on the organization (Reh, 2017).

Objective

The objective of this research is to identify the factors that affected engineers that have successfully made this career transition to managerial level so that critical factors of successful transitions can be identified. This research will seek to identify the commonality between different experiences through various industries, genders and age groups by identifying a diverse population sample.

3. Research Methodology

The scope of the research is specifically a focus on the influencing factors throughout the transition phase. The research follows a qualitative structure as the research is exploratory in nature by seeking understanding of the underlying opinions of the interviewees (DeFranzo, 2011; Kruger, 2017). The reflections on the various questions by the respondents need to be translated into code to remove the influence of meanings on interpretations. The coding was done through MaxQDA and refers to the coupling of words to numbers, symbols and tags.

Target population

The interviewees were all identified according to their careers using a convenience sampling methodology. All of the respondents needed to have an engineering background and transitioned to a managerial level position. Through having semi-structured interviews with these respondents the primary data was gathered and reworked to accurately identify corresponding themes and factors to make recommendations.

The population was made up of people that conform to all the following criteria:

- Have engineering background or completed engineering studies
- Made a transition to a managerial role
- Successfully filled the role of manager (i.e. stayed in a management position for most of a career, retired from a managerial position or is still in a managerial position)
- In South Africa

Data collection

A measurement tool was constructed based on research and piloted against a smaller sample to ensure accuracy. The questions were structured around the understanding of managerial responsibilities and the traits that combine in a good manager as identified through an extensive literature review. The measurement tool was defined as an interview guide consisting of nine open-ended questions that aimed to allow discussion around topics of interest. The questionnaires have 2 sub-sections - Section A separated demographics, although they may not be determinants in this research (further research could refer to the data obtained). Section B is focused on perceptions of factors that influenced engineers' transition to management focusing on managerial, leadership and administration factors. Data was gathered through

interviews and transcribed to enable the analysis thereof. These analyses were performed using software systems such as MaxQDA and assistance was given by the NWU Statistical Consultancy Services.

This research was validated through piloting the interview guide against two engineers in managerial positions. Their feedback was considered in the finalized structure. Due to the open ended nature of the questions the interviews were determined to be approximately 30 minutes (ranged between 15 minutes and 60 minutes). The data was collected through semi-structured interviews. The interview was recorded to create a certified data set with hand-notes being made of items that were noticed. These interviews were transcribed afterwards and analyzed using MaxQDA built-in coding functions.

Data saturation
Of the 15 respondents contacted, 12 responded affirmatively giving a response rate of 80%. As the population cover a wide range it is concluded that the sector was satisfactorily covered in the population. The responses show that the opinions raised reach across the different demographic identifiers. Interviews were held with the 12 individuals and saturation was confirmed after no new inputs arose after 5 consecutive interviews. A trend could clearly be seen to form and the saturation was assumed. As all the targeted respondents fitted the criteria as determined, all the interviews were used as data for analysis.

4. Discussion of Findings

Section A - Demographic profile
A summary of the selected respondents can be seen below. The summary gives more detail about specifics of each respondent but overall the sample was very widely spread over the engineering industry and was accepted as a very good reflection.

Table 2: Population profile (Source: Own Compilation)

Identification	Age	Gender	Highest qualification	Job title	Sector
Respondent 1	48	Male	Masters degree	Director	Civil
Respondent 2	44	Female	Bachelors degree	Director	Mechanical
Respondent 3	31	Male	Masters degree	Business devlopment	Nuclear
Respondent 4	35	Male	Honours degree	Director	Consulting
Respondent 5	31	Male	Bachelors degree	Engineering manager	Manufacturing
Respondent 6	55	Male	NDP	Director	Mining
Respondent 7	45	Male	Bachelors degree	Director	Mechanical
Respondent 8	75	Male	Bachelors degree	CEO	Railway
Respondent 9	31	Male	Bachelors degree	Mechanical Engineer	Mining
Respondent 10	34	Female	Bachelors degree	Operations Manager	Chemical
Respondent 11	32	Male	Masters degree	General Manager	Process and Systems
Respondent 12	31	Male	Bachelors degree	Production Manager	Manufacturing

Having collected demographic information of the target population Section B discuss the perceptions of the respondents through their transition to management.

Section B - Critical transition factor identification
The section consisted of identified themes. All of the respondents were chosen for their engineering background and having moved to a managerial position. This section of the interview guide focused on identifying the factors that influenced their transition to management and their perceptions towards these factors.

Transition difficulty factor identification?
The majority perception of the engineers was that their newly found authority over people caused them uncertainty and discomfort. All respondents mentioned factors that correlated to the management of people.

The difficulty in management of people plays a major role in the establishment of a new manager. The perceptions of others towards the individual going through the transition, skills to manage these perceptions and the skills to efficiently take over the new responsibilities as a manager is perceived to have been a definite factor in their transition.

Other themes that were noted are of feelings of lacking the management *training* to be able to perform the tasks required prior to their transition and letting go of their previous role – as one respondent answered: "*Delegation didn't come naturally as I wanted to do everything myself*" (Respondent 6, 2018). The training shortage was aimed at making financial interpretations from statements and just the general perception of not knowing when financial indicators were manipulated.

Letting go of their previous roles showed fear of *uncertainty* (Mobbs, 2015) of what is known and trusting others to perform the tasks to the same quality level. The situations described by the respondents was described as depending on others and giving up the certainty of the technical calculations and control.

These factors indicate that people and preparedness for the new role are the main themes causing difficulty in the transition and are summarized well by a respondent as: "*The management of people without the training on how to manage people. We have to rely on leadership and is mostly a self-taught leadership. Coming from a technical background we are not taught this.*" (Respondent 2, 2018). Managerial applications were seen to be mentioned seven times, delegation mentioned six times and cultural differences mentioned four times. A summary of the stated factors can be seen in table 3:

Table 3: Influencing factors contributing to difficulty of transition (Source: Own compilation)

	Factors causing difficulty in the transition	
1	Fear	General fear of doing wrong and the effects thereof
2	Leadership	Understanding the role of leadership, how to lead and leadership theories
3	Uncertainty	Uncertainty in what deliverables are of the new role, what is allowed and what not and no experience in certain aspects
4	Background	Changing from a technical background to a mangerial frame of mind
5	Managing the human factor	Dealing with the lies, feelings and motivation of subordinates. Also thedealing with personalities, different generations and different cultures.
6	Unpreparedness	The allowing for time and training to adequately develop in to role and communicating what the new role entails
7	Management of relationships	The management of how relationships changes, how the perception changes and how to build constructively on these relationships
8	Being the boss	Telling others what to do and finding the balance between telling them how to do it and allowing empowerment. When to enforce and when to let go.
9	Delegation	Letting go of a previous role going for the unknown, trusting others to perform their work to a good quality
10	Managerial aspects	The management of people, the evaluation, supervision, time management,

Success factors in the transition?

The theme that showed most prominent in this question was one of overall comfort towards the responsibility and authority. This could be seen as a taught skill as they were responsible for engineering applications and needed to convey their ideas with justification from a technical view. Transferring this to managerial applications they are comfortable with the responsibility that comes with it - worded as *confidence* in their abilities and in themselves (75% of the respondents).

Each of the other themes mentioned could be seen as reasons why they had confidence - knowledge, experience, project management and logical. Respondent 5 (2018) said that "*the skills were there so doing the work wasn't difficult. You had the knowledge and planning capability and thus you saw the results.*" In identifying the strengths that engineers can use to leverage them in reducing the effect and optimize the transition through working to the strengths.

Table 4: Strength factors improving the transition gap (Source: Own compilation)

	Strength Factors	
1	Confidence in abilities	Maintained confidence in abilities to learna dn adapt
2	Experiences	Experience in project management and applications
3	Responsibility	Accepted responsibility easily and thrived on it
4	Logical	Being able to logically analyse problems towards solutions
5	Strong work ethic	Work hard towards goals and targets

Drivers towards successful transition?

To successfully complete the transition, the drivers as experienced by the respondents were identified. The theme identified the most was that they experienced the transition to a managerial role *as a form of recognition* - the belief in them and their capabilities. Due to their perception of receiving recognition motivated them to continue delivering and reach the goals set for them: "*I saw it as a form of recognition and I enjoyed that thoroughly*" (Respondent 4, 2018). The next theme was the *empowerment* given to the respondents. Also the trust given to the respondents to manage their own time. This correlate with the first theme in that the authority given can also be seen as recognition that they are capable of managing their own time and are trustworthy in managing others. "*The fact that I had my own time and was allowed to manage my own time and don't need to report to anyone.*" (Respondent 8, 2018). The driver for respondent 2 was the responsibility that was assigned. Two respondents stated that the authority as perceived by others in their new position drove them to maintain the perception and to not disappoint. These themes could also be seen as related to the recognition and empowerment aspects and thus showing a strong driver as the perception of recognition and conforming to the expectations set by themselves and others.

The last two themes identified were money and making a difference. These themes were stated in conjunction with other themes but are still seen as drivers. "*Money. The main attraction to management is the money. The responsibility grows and you feel you make a difference but money makes life easier*" was said by Respondent 2 (2018). The next table give a summary of the findings here.

Table 5: Drivers of successful transitions (Source: Own compilation)

|	Drivers for successful transition	
1	Responsibility	The added responsibility and the want to maintain authority
2	New experiences	The new experiences such as travel and being part of something new
3	Money	The extra money is a driver to ensure a successful transition
4	Authority	The authority of the new role drives to not dissappoint
5	Making a difference	To make difference in others as well as the organisation
6	Empowerment	Empowering those you you can and being empowered to make your own decisions
7	Recognition	The transition is a form of recognition that drives to get more

Enduring the hardships is made easier by experiencing positives. To increase future transitions, it is valuable to note which drivers influenced the candidates and to incorporate these drivers as a method of enhancing success from an organizational perspective.

Negative influences during transition?
The negative experiences during the transition periods are indicative of overall uncertainty. The perceived negativities identified by respondents were in correlation with difficulties to indicate themes of influencing factors towards the success of the transition. The theme of managing the relationships in the new role was mentioned by six respondents. The authority and responsibility of the new role were seen to cause difficulties that definitely played a role in the transition. The respondents perceived a definite division in the relationships between themselves and the other staff. There was also a perception that they were treated differently and perceived differently and this needed to be managed. This is a definite factor and the changes can be subtle or drastic. "*The change from employee to manager came with a definite division. One day we were having coffee and sharing stories and the next I was seen as part of management*" (Respondent 8, 2018). The responsibility to manage the lies, effectiveness and feelings of their subordinates and others that they work with, forms part of a managerial role and as the responsibility shifted uncertainty in dealing with this also became apparent. This theme aligned with the theme of letting go of the previous role duties. It is also noted that in this theme no reference was made to trusting others to perform the old duties, merely that it was perceived as difficult to delegate these activities.

Two unique responses were also stated. Respondent 9 stated he "*never allowed himself to perceive anything as a negative*", while Respondent 7 said that his negative experience "*was the delay in his financial benefit in the time*". This could be seen as a removal of a driver for success that is also worth noting. The next figure indicate the themes.

Figure 3: Negative experiences in transition (Source: Own compilation)
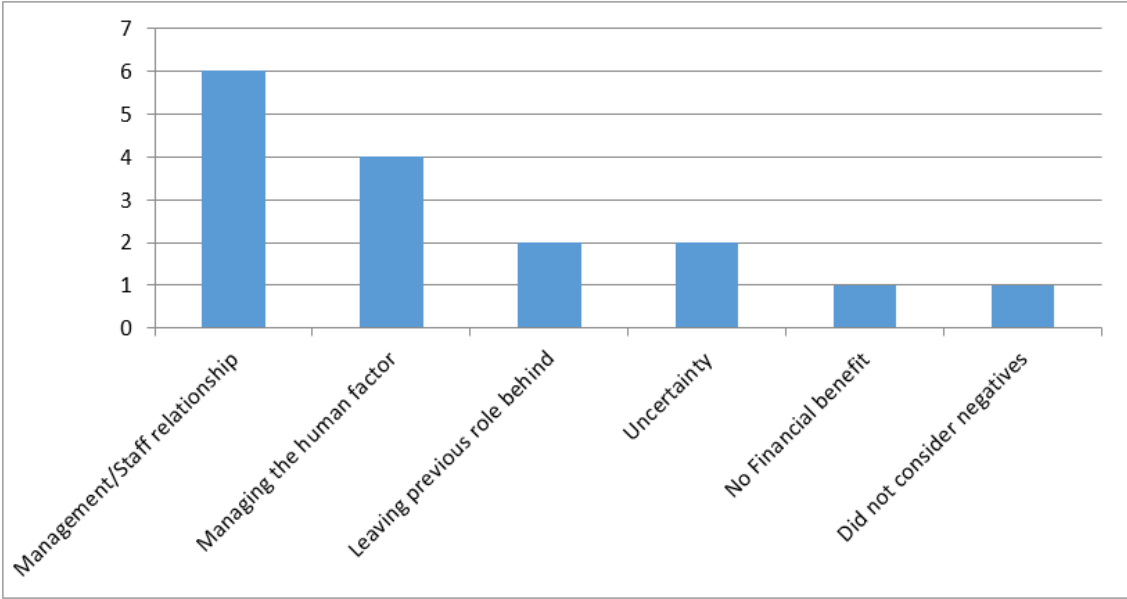
Retrospective views?
Learning from past experiences is critical and sharing experiences assist in moving forward and increase future efficiency. Through the recollection of their own experiences the respondents offered advice that they would have given themselves. The theme of "developing in to your role" was identified. The respondents saw the preparation for a role and the training required to perform with more certainty as things they would have done differently in hindsight. The two themes of "take your time" and "get help" identified separately, also aligns with this theme in that the respondents believed you should allow yourself the time to be ready for the new role through getting the needed assistance from mentors or external sources.

The theme identified through most of the correspondence is "don't be scared", an issue that verifies the experience of fear during this transition. The interpretation of the responses showed that they were scared to ask questions or get training. The uncertainty of the effects of choices seemed to be the main driver and considering this in transition environments could be constructive. A theme of leaving the money out of consideration when deciding to make the transition to management and trusting others with care was also noted. These advice sorted by theme are summarized below.

Table 6: Retrospective advice (Source: Own compilation)

		Advice for transition
1	Forget about the money	There will be money to be made later, don't let money be your main influence
2	Trust others carefully	Trust is earned. Trust those who show you that they can be trusted
3	Take your time	Don't rush yourself and don't be rushed in to taking the next step
4	Get help	Talk to people in the organisation and externally to assist with difficulties
5	Develop yourself	Get training, grow in experience and develop into the new role
6	Don't be scared	We are all scared in the transition, but you were chosen for a reason. Believe in yourself.

Mistakes throughout transition?
Delving deeper in to the perceptions of the respondents to identify difficulties and to propose advice to future generations the first theme noted was one of failure to create relationships with everyone. This is significant as management is dependent on others to do their work. The most noted theme here was one of trust. Four respondents stated that their blind belief in those that they oversee to have completed or will complete work tasks saw their responsibility quickly come into perspective. Similar to the case of advice, a mistake shared with others is less likely to be repeated. Mistakes made by the respondents in their own transition period were categorized and overlapping instances removed to offer a summary of mistakes to avoid – see table 7 for a summary.

Table 7: Mistakes that should be guarded against in a transition.

		Mistakes to avoid
1	Build relationships	Management is very dependent on people. Build strong relationships with everyone
2	Consult others	It is not a sin to ask. Ask questions and consult others before making decisions
3	Don't Change everything	Don't try to change everything to fast. Some things worked for a reason.
4	Preparation in key	Prepare yourself for your new role. Train, experience and grow
5	Trusting others	Don't trust people to keep their word or perform their work until they have proven themselves.

(Source: Own compilation)

From the above, two co-dependent themes can de deduced in trying to change everything and not consulting others. These themes were noted in statements of showing confidence by changing things and trying to do things without help. These were seen as eagerness to perform and coming across competent in the new role. These themes could also be interpreted as relating to the last theme identified which consisted of not getting the necessary training or transitioning to a new role before being ready. These themes all have an underlying

tone of uncertainty with regards to what is expected in the new role. The understanding of what a managerial role entails and how to be ready for the transition can be seen throughout the mistakes made.

Key breakthroughs in the transitions?

The pivotal moments in the transitions of the respondents were identified to gain insight pertaining to the breakthroughs made. Identifying what was done right is as important as not repeating mistakes. The respondents that obtained training, saw this as their biggest contributing factor to success. As Respondent 2 (2018) stated "*I also did managerial courses so I prepared well for the transition*" and respondent 8 said "*I qualified myself to a point where I was the highest qualified person and was the logical choice and understood most of the dealings.*" Those who did not receive training, saw their continued *work ethic* as the foundation of the successful transition. This theme was the most noted followed by the building of relationships to support them throughout this time. This is supported by a theme of empowering others stated by other respondents. These responses emphasize the importance of management in terms of the development and in the dependency on others. While one respondent raised the theme of self-belief, the complete statement also mentioned a continuous reaching of targets as in the work ethic theme powered by the capability received through preparation. These factors are summarized in the following table.

Table 8: Critical success factors in breakthroughs (Source: Own compilation)

		Things to do
1	Self-Belief	Beieve in yourself. You were chosen for a reason.
2	Training	Get as much training and experience as possible
3	Empower others	Empower those you can to achieve all they can
4	Built relationships	Build strng relationships
5	Work ethic	Keep working hard.

What are organisations looking for in managers?

In theory one can acknowledge various aspects of what people look for when a new manager is appointed. The respondents were asked to lift their views of what traits they look for in a managerial candidate. It needs to be noted at this stage that during the interviews, although the respondents were hesitant or needed to think about other answers, most of them knew exactly what they expected of candidates for a managerial role. The most noted themes were seen to be fit in to the organizational culture and be diplomatic. Respondents 2, 4, 6, 7, 8, 11 and 12 (2018) stated that fitting in to their organizational culture is important - "*he must fit into the company culture and work well with people both employees and customers.*" The word diplomatic was used to describe traits such as humble, care for others, good with clients, good emotional intelligence and inspire others. The second highest noted themes were being technically sound and a willingness to learn is very important but it is needs to be noted that this theme was noted less than culture and diplomatic. The theme of good supervision also speaks to these traits.

The next most noted theme is being a team player. The ability to work as part of a team forms a large part of managerial responsibilities as you are entrenched in creating as well as maintaining flow and culture. The theme of ambition was noted as a capturing of traits such as self-driven, results driven, think for themselves, take initiative, excited by environment and self-confident. This theme is interpreted as to encompasses the ability to work unmonitored and to keep driving forward to advantage of the organization. The themes of project management capabilities, administratively strong and loyal, were also noted. In this regard Respondent 2 (2018) replied "*they must think for themselves, fit into the culture of the organization, excited by their environment and thus stay longer.*" This themes were less prominent but should still receive the needed attention.

The stated list in the following table could however be specific to engineering sectors but comparison can be drawn to different fields of research.

Table 9: What organizations want from managers they appoint (Source: Own compilation)

		What companies want in a manager
1	Admin	Be administratively strong, up to date and neat.
2	Project management	Have the ability to manage a project and the deadlines involved.
3	Loyal	Be loyal to the organisation. Be truthfull and speak your mind.
4	Good supervisor	Be able to supervise those you have to in a possitive and consistent manner.
5	Ambitious	Be self-driven and innovative in your actions. Think for yourself and apply yourself.
6	Team player	Be able to work as part of a team towards the good of the team.
7	Technically sound	Be technically sound in what it is you need to do.
8	Learn	If you aren't sound in something, ake a point of learning it.
9	Culture	Fit in to the organisational culture and promote a positive culture
10	Diplomatic	Be humble, care for others, good with clients, good emotional intelligence and inspire others.

5. Conclusion and Recommendations

Ideally this research would be completed with a larger population to ensure that all factors are identified. Correspondingly all findings in this research should be considered with caution considering the population size.

Throughout the research the following were identified to merit future research:
- Different factors influencing men and woman in the South African context.
- Proposing a transition friendly management plan for engineers transitioning to management.
- Creating a culture for managerial transitions.
- The effect of leadership studies on engineers in management.
- Training successful engineers in management have undertaken.

In principle the identification of contributing factors will (in the long run) help improve the chances of a successful transition to managerial level. At the time of research engineers were seen to progress to managerial positions regularly with twenty-four of the top one hundred CEO's in the world having an engineering degree. Dominantly grounded in a technical background, the change to management can be seen as a different career and the transition to this new role plays a critical role in the success of such a candidate. In conclusion, the transition from engineer to manager and in specific the perceived factors that influenced this process individuals going through this transition can be summarized as follows:
- The engineers in this transition experienced the most difficult factor affecting them as the people-management aspects. These aspects included the management of others' time, supervising them, evaluating their performance and managing their time. It was also noted that managing the different personalities, cultures and generations played a role in conjunction with managing the newly formed relationships. The general theme of fear was also present due to unpreparedness, uncertainty and failure.
- The managers that came from engineering backgrounds identified the easiest part of the transition as their possession of a strong work ethic, applying logical thinking, accepting the new responsibility and their confidence in their capabilities due to their experience in managing projects and themselves.
- The drivers of their success were seen to be the perception of receiving recognition. They also felt empowered through their authority and ability to make a difference. The new experiences, money and added responsibility were also identified as factors that drove them to be successful.

- In retrospect, it was identified that an ethic to hard work, the building of relationships, empowering others, training and self-belief were seen as the biggest contributors to their mutual success in the transition to management.
- The biggest mistakes that were made throughout their transitions, were trusting others on matters of belief and work quality.
- In the assessment of what attributes a potential managerial candidate should encompass - being diplomatic and a fit for the organizational culture was identified as most prominent. Being technically sound and possessing a willingness to learn were also mentioned very highly. A manager should be seen as a team player, ambitious and a good supervisor.

The findings are significant for organizations and individuals as they form an insight into what is experienced by individuals going through the transition from engineer to manager. It also enable companies to prepare a more transition-friendly process and assist in areas that are not catered for. The research warrant further investigations, especially in terms of further demographic categories such as country boundaries and gender perspectives. The factors however seem to be similar over all sectors, companies and age groups showing that little is done to improve the influencing factors for the engineer to manager transition. But, being able to identify what to do is significant in setting the base for a successful transition. The respondents identified that what they perceived was the single biggest thing that contributed to their successful transition to management. In applying these principles, it is hoped to increase the success of transition as well as increase the overall perception.

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Paper 21

The relationship between Work Motivation and Employee Engagement in a South African Higher Educational Institution

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Abstract: The key aim of this study was to investigate the relationship between Work Motivation (Intrinsic & Extrinsic) and Employee Work Engagement among academic staff in a Higher Education Institution (HEI). In higher education institutions (HEIs), the retention of knowledge workers, has become a crucial issue. HEIs are particularly vulnerable as they lose their highly qualified employees to the private sector for better rewards and benefits. Talent retention and employee turnover, therefore, are major concerns. Thus the need to investigate the relationship between work motivation and employee engagement within the Higher Education Institute, with focus on a specific tertiary institution. This tertiary institution was selected as it is a large HEI located in Durban, South Africa. A quantitative research approach was used for this study. A sample (n= 318) was drawn from employees of the specific tertiary institutions academic staff. Two standardized questionnaires: Utrecht Work Engagement Survey (UWES), and Work Preference Inventory (WPI) for motivation (intrinsic and extrinsic) were used to obtain the needed information from the participants. The results show a significant positive correlation between employee engagement and intrinsic motivation, as well as a negative correlation between extrinsic motivation and employee engagement. The results showed that educational qualification did not make a significant contribution to employee work engagement. The age of the participants significantly contributed to employee work engagement and was the second strongest determinant after intrinsic motivation. The findings revealed that as employee's age increased, their work engagement levels also increase. Furthermore, the findings point out that academics from the institution of interest prefer intrinsic factors to enhance their work engagement. Recommendations showed that the specific institution of interest organizational objectives would be met by providing (intrinsic) motivation that allowed employees to be more engaged.

Keywords: *Work Motivation, Employee Engagement, Intrinsic Motivation, Extrinsic Motivation*

1. Introduction

Work motivation and employee engagement are critical issues for today's enterprises. Due to the dynamic nature of the corporate environment, employers are constantly seeking to maximize the potential of their staff to remain competitive within the global labor market. Motivated employees are more engaged and prove to be genuine assets when it comes to the optimum objectives of the organization (Demerouti, *et al*, 2012). Wollard and Schuck (2011) refers to employee engagement as "a psychological presence of employees in conducting their duties within their specific organization". In addition, the author considers the psychological presence as aspects of the physical, cognitive and emotional nature. These three facets are activated at the same time in order to generate an engaged state. Within the field of Human Resources Management (HRM), motivational factors (intrinsic and extrinsic) are viewed as important instruments for positive employee outcomes. Silvera (2013) supports this notion with an analysis that organizations recently have pushed for more motivational incentives for long term positive employee outcomes.

Due to the current rapidly changing economy, global business competition continues to increase. Given this scenario, organizations are looking for more efficient strategies to maximize their human resources to improve on efficiency and productivity. In this increasingly competitive market, George and Jones (2012) recommended that it is not adequate to cut costs by making use of new technologies or to lower employees' wages. They argue that for an organization to improve production and efficiency, they need to make use of

employee skills. Subsequently, employee motivation and engagement levels effect their production and efficiency.

2. Work Engagement and Motivation

The dynamic global economy has facilitated the need for organizations to explore employee engagement to achieve optimal results at a minimal expenditure (Christian, Garza and Slaughter, 2011). It has been proved in research done by Global Work Place (2013) that a more satisfied and well-motivated employee is a well engaged employee. In line with most organizational goals, employee engagement holds the key for a successful organization, especially in today's modernized business environment. In addition, Xanthopoulou, Bakker, Demerouti and Schaufeli (2010) found that employee engagement is associated with higher levels of profit and development.

There has been an increase in the number of disengaged workers across the globe. Global Work Place (2013) reported a total of 13% of employees across 142 countries were engaged in their work duties and 87% of employees surveyed were emotional disengaged in terms of their duties in their respective work places. The trends in global employee engagement report by Aon (2016) highlighted that the changing face of the world appeared to have impacted employee engagement. Among other factors, rapid technological growth has made some jobs obsolete, creating uncertainty and anxiety among workers which has led to a drastic increase of employee dis-engagement. With such alarming statistics one can speculate on the impact employee engagement has had on global economies.

Gallup (2015) asserts that due to lack of employee engagement, the United States of America (USA) loses billions of dollars annually. Furthermore, the report adds that African countries have the highest levels of active disengagement in the world. In addition, the study conducted by Aon (2016) which included 75 organizations across Sub Saharan Africa representing more than 300,000 employees showed high levels of disengagement with East Africa scoring 74%, followed by Southern Africa (represented by Zambia, Namibia, Botswana, Lesotho and Swaziland) at 70%, while South Africa scored 68%. However, with the high rates of unemployment within the African continent, disengaged employees are remaining in their jobs despite their unhappiness, this results in more drastic consequences to the production and efficiency levels of organizations. Kahn (1990) explains that when employees are engaged they are physically, cognitively and emotionally immersed in their work tasks, whereas when employees are disengaged they withdraw physically, cognitively and emotionally in their work tasks. However, the concept of engagement requires employees to have self-expression and self-employment in their work lives.

Grant (2010) asserts that motivation is an instrument that can be used to enhance work engagement for employees within the organization, hence it is important to understand the relationship between work motivation and employee engagement. Newman (2010) explains that "human behaviour is far too complicated in that some desires are conscious and some unconscious, thus making the definition of motivation difficult to conceptualize". Motivation is categorized into intrinsic and extrinsic elements. Rosenfeld (2013) asserts that when the intrinsic and extrinsic needs of employees are satisfied, employees are more engaged in their work, have high personal and group satisfaction, acquire a sense of responsibility, loyalty and confidence to achieve their personal as well as organizational goals.

Different types of motivation have been under inquiry for a long time. The main reason why this subject has been under investigation is that not only does it affect employee productivity, but it impacts highly on organizational performance. In terms of extrinsic motivation, researchers have established a relationship between worker's psychology and monetary rewards. Ali and Ahmad (2009) investigated the relationship between reward and recognition with regard to employee satisfaction from a group of Unilever employees in Pakistan. The results from the study indicated that there was a positive relationship between reward, recognition and employee satisfaction. The case studies mentioned above indicated that employees' value monetary rewards in relation to their job satisfaction.

Researchers have used different factors of intrinsic and extrinsic motivation to verify the effects of motivation on employees in different sectors of the economy. However, different motivational factors, intrinsic factors, such as interesting work, job appreciation, job satisfaction, stress and extrinsic factors, such as job security, promotion and growth, good wages, recognition have been common in all these studies. These have been adopted for this study. These factors are in line with CET (1985), Self-determination Theory (SDT) (1997) Herzberg's Two Factor Theory (1959) and Adams Equity Theory (1963). In addition, different researchers have presented and argued that motivated employees are productive employees and studies have shown a positive correlation between motivation and performance. Considering previous research on motivation, the connection between the two types of motivation (intrinsic and extrinsic) and employee engagement has motivated the researcher to investigate this topic.

3. Methodology

The research conducted in this study comprised of a literature survey and the empirical study. Furthermore, a correlational design was adopted as it determined a statistically positive and negative significant relationship between the variables in this study being; work motivation and work engagement. Subsequently, a case study approach was espoused for this research in respect of its ability to examine a complex phenomenon at a broader level, as well as its ability to present knowledge of what is known about a phenomenon through previous research. The researcher reviewed the literature on the topic and then conducted an empirical survey. According to Bryman (2012) an empirical survey refers to the process of acquiring information by means of direct or indirect observation or experience. Standardised questionnaires, the Utrecht Work Engagement Survey (UWES) and Work Preference Inventory (WPI) were used as means of acquiring knowledge on the relationship between employee motivation and work engagement.

The study site for this research was one of the HEI's based in Durban. The institution chose to remain anonymous and for the study not to use its name. This specific HEI has four campuses, in which the researcher conducted this study. The target population of this study constituted all the academic staff that are employed by the specific HEI, by including all four campuses. The university employs 1874 academic staff throughout its campuses and this information was obtained from the universities internal database through the Human Resources Management Department of the institution. The sample comprised of academic staff employed at the university. It should be noted that executive managers and senior managers are considered employers of the university; therefore, they were excluded from this research, since its focus was on employees. For this study, Sekaran (1992) suggested that 318 elements were an appropriate sample size for a population of 1874 and would yield credible experimental results. Therefore, the sample size of this study was 318.

In respect to the sampling technique, probability sampling was used, employing simple random sampling seeing that the researcher's main focus was to investigate the relationship between work motivation and employee engagement. All members of this specific HEI's academic staff (the population) had the equal opportunity of being selected for the study. Each individual was chosen entirely by chance to be included in the final sample. Data for this study was obtained from primary sources and secondary sources. Primary data was attained by the means of standardized questionnaires, namely the Utrecht Work Engagement Scale (UWES) and Work Preference Inventory (WPI). The survey questionnaires were sent via email. The secondary sources of data used in this study included; books, journals, thesis and dissertations. In respect to the data analysis of the primary data, results obtained from the structured questionnaires were captured into a data set and were analyzed using the Statistical Package for Social Science (SPSS) version 24. The researcher also used descriptive statistics to explain the data obtained.

4. Presentation and Discussion of Findings

The demographic results of the study are presented below. These demographics include; gender, age, race, and marital status. In terms of gender, Figure 1 reveals an almost equal split in the results that were achieved in relation to the male and female representation. According to the Figure 1, 153 (48.1%) of the respondents

were female, compared to 165 (51.9%) that were male. The findings represent an accurate balance of gender representation.

Figure 1: Respondents' distribution by gender

Gender(n=318)
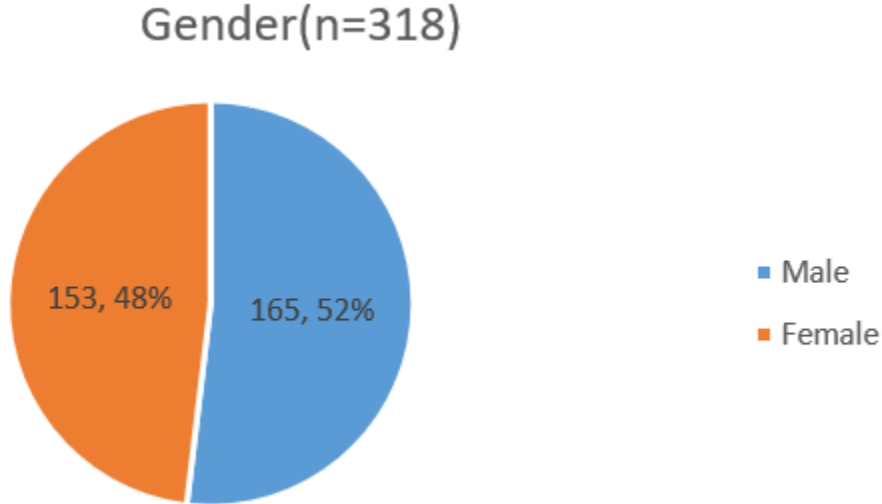
With reference to Table 1, majority of the respondents (141) fell between the ages of 36 and 45 years (44.3%). This was followed by those who fell between the ages of 25 and 35 years, 132 (41.5%), between the ages of 46 and 55 years, 21 (6.6%), 24 years and younger, 15 (4.7%) and 56 years and older, 9 (2.8%). The findings show that the respondents were relatively young, as most of them fell in the age range of 25 and 45 years old. The reason for such a response could be that the HEI is noted to be a diversified institution, which houses other institutions of higher learning therefore attracting younger people for educational and work purposes.

Table 1: Age representation of respondents

Age (in years)	Total (*n*=318)
24 and below	15
25- 35	132
36-45	141
46-55	21
56 and older	9

Table 2 indicates the racial breakdown of the respondents. The racial breakdown is as follows: Africans, 132 (41.5%), Indian, 96 (30.2%), 63 (19.8%) were white. While Coloureds made up 24 (7.5%) of the respondents. The remaining indicated themselves as other, 3 (0.9%). However, no further details were provided by these respondents with regard to their race. Ultimately the spread across the ethnicity categories was acceptable.

Table 2: Race representation of respondents

Race	Total (*n*=318)
African	132
Indian	96
White	63
Coloured	24
Other	3

Table 3 depicts respondent's marital status statistics. According to the results, the majority of the respondents said they were married 120 (37.7%) followed by those who said they were single 93 (29.9%). Other respondents, 66 (20.8%) indicated that they were divorced. Those who said that they were widowed

comprised 36 (11.3%) of the respondents. The remaining respondents did not want to disclose their marital status and they made up 3 (0.9%) of the respondents as indicated in Table 5-3. Generally, only 120 out of the 315 respondents, who indicated their marital status, were married.

Table 3: Marital representation of respondents

Marital status	Total (*n*=318)
Single	93
Widowed	36
Divorced	66
Married	120
Other	3

This study constituted of 3 main objectives:
- To determine the relationship between employee engagement and intrinsic motivation among academics at the HEI.
- To determine whether motivational incentives (extrinsic) have a significant influence on employee engagement of HEI academics.
- To determine how well a set of variables, intrinsic motivation, extrinsic motivation, length of service, educational qualifications, and age, predict employee engagement.

The results obtained from the analysis of the study indicated a significant positive correlation between employee engagement and intrinsic motivation at this HEI. According to respondents, as they become more intrinsically motivated they also become more engaged in their work. The results show a positive significant correlation between intrinsic motivation and work engagement ($r= .47$, $p< 0.01$). This positive correlation means that as an employee's level of intrinsic motivation increases, so too, does their level of work engagement. The relationship is moderate as indicated by the r value of .47 which means that there is a good association between the two variables (intrinsic motivation and work engagement). Connaway (2016: 79) suggests the following guidelines pertaining to the strength of the correlation relationship, "Small - r= .10-.29; Medium - r= .30 - .49; Strong- r= .50 – 1". These results corroborate ideas, opinions and results from various past studies (Saks, 2011; Remi, 2011; Perrachione, *et al*, 2008; and Markos and Sridevi, 2010) which also predicted a positive relationship between intrinsic motivation factors and & engagement. Intrinsic motivation was measured with its fours factors, i.e., interesting work, job appreciation, satisfaction and stress. The study found that academics at this HEI consider these factors important in relation to work engagement.

Secondly, the results from the analysis shows a negative correlation between extrinsic motivation and work engagement ($r= -.21$, $p<0.01$). This means that as the employees' level of extrinsic motivation increases their level of work engagement decreases. The results also show that the relationship is weak as indicated by the r value of -.21, which means that these two variables (extrinsic motivation and work engagement) do not have a favourable association. Therefore, factors other than extrinsic motivation could have a better influence on work engagement. Extrinsic motivation was measured through job security, good wages, promotion and growth and recognition. As compared to intrinsic motivational factors, extrinsic motivational factors were not considered as more important in employee engagement by academics at this HEI. The more extrinsically motivated employees were, the less engaged to their work they become. A probable explanation could be that when employees are more motivated by the external incentives such as bonuses, good wages and promotion, they become so focused on these gains that they become less attached to their current work.

Lastly, in relation to the third objective of this study, the results obtained revealed that the highest **length of service** does not make any statistically significant contribution to employee work engagement. In other words, there is no association between the demographic variable, length of service and employee engagement. These results validated the findings by Swaminathan and Ananth (2012) who concluded that there was no association between length of service and employee work engagement. Swaminathan and Ananth (2012) further went on to say that if there was any effect that length of service would have on employee work engagement it would be a negative effect, a longer length of service would result in employee

disengagement. Jenkins and Delbridge (2013) noted that as the length of service increases, conditions such as boredom and job dissatisfaction start to emerge which results in lower levels of employee work engagement.

Educational qualification does not make a statistically significant contribution to employee work engagement. In other words, educational qualification does not determine whether employees will be more engaged in their work or not. Similar to the results of this study, Swaminathan and Ananth (2012) found no difference in the levels of engagement of employees with different levels of educational qualifications. The aspect of employees being more knowledgeable in their work can also be influenced by their past experience, training and development and need to achieve. Therefore, it would be difficult to use educational qualifications to determine how employees perform at their jobs. However, Thomas and Feldman (2009) argued that the more educated employees are, the more they use their cognitive abilities to solve complex tasks and perform well on their jobs This is closely associated with employee work engagement.

In relation to **age** this study found that age made a statistically significant contribution to employee work engagement and was the second strongest determinant after intrinsic motivation. The results of the regression analysis showed that as employee's age increases, their work engagement levels also increase. This study lends support to the suggestions made by Holdsworth, Hoel and Zapf (2013). They noted that older employees would have mastered the skills and techniques of dealing with stress and therefore have the potential of being more engaged in their work. In addition, Holdsworth, Hoel and Zapf (2013) stated that older employees are more mature and have more experience in their roles, positions and work places. Therefore, they know what they want and they are better engaged in their jobs.

Table 5: Regression summary of the predictors of work engagement

Predictors	Beta	T	Sig.	Tolerance
Intrinsic motivation	.412	8.205	.000	.947
Extrinsic motivation	-.089	-.1696	.091	.865
Length of service	-.021	-.284	.776	.423
Highest level of education	.113	1.873	.062	.651
Age	.146	2.069	.039	.479

With reference to Table 5, the analysis shows that the regression model accounted for a significant proportion of the variance (27.6%) in the dependent variable (work engagement), R^2= .276; F= 23. 130, p< 0.001. This means that 27.6% of work engagement is explained by the five variables (intrinsic motivation, extrinsic motivation, length of service, highest level of education and age). However, of all the five variables presented in the analysis, only intrinsic motivation and age make a statistical contribution to work engagement, B = .412; t = 8.205; p< 0.001 and B = .146; t = 2.069; p< 0.05 respectively. The analysis further shows that intrinsic motivation is the strongest determinant of work engagement B = .412. Therefore, employees with high levels of intrinsic motivation are more engaged in their work. Even though age also makes a statistically significant contribution to work engagement, its contribution is not as high as that of intrinsic motivation, B =.146. However, according to the analysis, as an employee's age increases the more they become engaged in their work. The results from the regression analysis also show that extrinsic motivation (B = -.089; t = -.1696; p>0.05), length of service (B = -.021; t = -.284; p>0.05) and highest level of education (B = .113; t = 1.873; p>0.05) does not make a statistically significant contribution to work engagement.

The study showed a positive relationship between intrinsic employee motivation and work engagement; and a negative correlation between extrinsic motivation and work engagement among the HEI academics. Attention was drawn to the relationship between intrinsic and extrinsic motivation and work engagement and showed the impact of work motivation (intrinsic and extrinsic) and employee engagement in a HEI.

5. Recommendations to Management

Since these HEI academics increase work engagement through intrinsic motivation, the institution should now find out about the strategies that provide intrinsic motivation for their employees. The HEI management needs to note that the more academic staff are intrinsically motivated, the more likely they are to positively engage in their work duties. Since work engagement increases with age, this HEI should come up with strategies to increase work engagement in their young employees, since they are a significant population of their employees. The HEI management should come up with policies and strategies to improve work engagement apart from motivation as there is no one best solution. A need to look beyond motivation remains. Since human capital is the most important resource of every organization, Furthermore, policies and strategies need to be developed to continuously monitor and attempt to improve work engagement of their employees.

Additionally, this study contributes to the existing literature of employee work motivation and engagement. Essentially the most important contribution is to divert management's attention towards employees work disengagement and enable management to think about how motivational factors could be utilized for employee engagement for academics in this HEI. This literature also postulates that employee work engagement makes a difference that enables workers.

Conclusion

The findings concluded that there is a significant relationship between intrinsic motivation and employee engagement and that there is no significant relationship between extrinsic motivation and employee engagement. Furthermore, the findings of this study provide instruction to the HEI management about the institution's efficiency and effectiveness in relation to motivation and work engagement. The study suggests that organizational objectives will be met by providing intrinsic motivation which will make employees more engaged. Organizations need to foster a conducive work environment that enables employees to be intrinsically motivated, so as to be engaged in their jobs. The HEI should consider investing in their academics for successful operations and to retain good talent. Otherwise, employees would be disengaged from their job, which costs the institution in terms of increased turnover. More so, organizations grow through financial reliability and maximization of their investments; therefore, employee work engagement will foster excellence in operations and productivity. Furthermore, from this study, the HEI will be equipped with useful information regarding motivation and engagement, which will help to formulate policies accordingly. Both the organization and employees could use the findings of the study for better outcomes.

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Paper 22

Consumer perception of service quality at a selected bank in Cape Town

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Abstract: In this paper consumer acts, such as collecting a bank card or activities such as opening business accounts, which are offered by a bank to a consumer is evaluated in order to determine the consumers' perception of specific dimensions of service, namely reliability, responsiveness, assurance, empathy, and tangibles. The purpose of the study is to understand bank performance regarding service provision, based on the understanding of both service quality and consumer perception. This paper identifies service gap(s) in developing a service quality management framework that can be linked to competitiveness and marketing strategies in a banking environment. The service quality management framework combines service quality dimensions with theoretical framework elements such as policy, people, process and technology in order to produce a new mode of service provision that is compatible with bank competiveness and consumer satisfaction within a specific strategic marketing context. This study utilized the survey method to collect quantitative data from 100 respondents who are clients at selected branches of a bank in Cape Town. The questionnaires were administered to purposively selected respondents, based on their banking profile such as personal and business banking customers within the universal code of research ethics. Responses received were analyzed using the Statistical Package for Social Sciences (SPSS 24.0). This paper found a significant relationship between actual and perceived service provision. This paper suggests that a model that combines management theories and quality dimensions may be used to obtain a better understanding of the quality of banking services in order to improve decision making and that, may, in turn, impact upon strategic marketing and competitiveness.

Keywords: *Competitiveness, Strategic Marketing, Technology, Processes, Banking Services, Services Quality*

1. Introduction

Consumer satisfaction is one of the most important factors determining performance in the banking industry. Consumer satisfaction levels differ when it comes to commercial banks, thus measuring consumer satisfaction is very important (Zopounidis, 2012). In recent times the banking sector has experienced the disruptive effects of advancements in digital technology. This has resulted in more options available to the consumer, including ones that are more flexible and responsive. This is also the reason why banks listen to consumer requirements and complaints. Profitable businesses cannot exist without satisfied consumers, especially in service-oriented industries. The banking sector, in particular, represents a highly competitive industry and therefore determining services quality is an important component of assessing a bank's competitive position. Even less attention is paid to service quality in an era where the level of competition has intensified (Ahmada, *et al.* 2014; Camarate, & Brinckmann, 2017; Glowa, 2014). This paper explores the perceptions of services quality of a local bank in Cape Town.

Problem Statement
The understanding of consumer perception in service quality is important for strategic marketing and competitiveness, image, branding; and the integration of key elements like policy, people, processes and technology. Following the amalgamation and rebranding of the selected bank in South Africa, the need to understand consumer perception of banking services becomes even greater. This study evaluated consumer perception of banking service quality.

In the banking industry the level of service quality has been influenced by external and internal factors. Some of the internal factors include non-adherence to policy, procedure and limited skills of technology that have

led to service failure, resulting in high staff turnover and subsequently perceptions of lower service quality (Accenture, 2012). The banking sectors' competitiveness is linked to consumer perception and service quality (Camatrate & Brickmann, 2017).

The external factors include disruptive technology, such as digital technological solutions, that have allowed new entrants into the market. In this regard the big banks have experienced consumer switching as the new players in the market are offering more flexible solutions at lower costs. What are the perceptions of consumers towards the quality of banking services? Is there a gap between consumers' perception of service quality and actual services? Banks have not been able to effectively measure services quality, resulting in high rates of consumer switching, as consumers seek better options for higher levels of satisfaction (Glowa, 2014). This study draws on Parasuraman, *et al.* (1988) SERVQUAL dimensions to address the research questions. These selected SERVQUAL dimensions are as follows:

Tangibles: These include the appearance of employees, physical facilities being offered, and equipment which form part of service experience.
Reliability: The way the service is being delivered, that is, the ability to deliver the promised service precisely and consistently.
Responsiveness: Willingness to help consumers, respond to their queries and also to provide a rapid service to them.
Assurance: Understanding and courtesy of staff, and their capability to inspire trust and confidence.
Empathy: Helpful care for the consumers' requirements and the provision of individualized, compassionate attention to consumers.

2. Overview of the Banking Sector

Consumer perception of service quality is one of the most important factors in ascertaining brand competitiveness, consumer satisfaction, attraction, and retention. With changes in the banking sector, bank competitiveness would depend greatly on service quality that are satisfactory, with the potential of attracting new consumers as well as retaining existing ones. This study was conducted against the backdrop of both a changing banking sector, as well as a rebranding effort of a participating bank in Cape Town. The perception of consumers was thought to be an important indicator of service quality measurement of the program of competition and differentiation in commercial banks (Zopounidis, 2012). This is in addition to industry 4.0, new and emerging technologies and their impact on service provision; customer appetite for improved service quality and a propensity for changing taste, preference and lifestyle. This has resulted in more services from more banking service providers to choose from, on the part of the consumer, including services that are more flexible and responsive. The majority of complains relate to the right to demand a good quality service, which requires banks to listen to consumer requirements and complaints. A profitable business cannot exist without satisfied consumers, especially in service-oriented industries.

The banking sector represents a highly competitive industry, because of the banking structure and therefore determining service quality is an important element in assessing its competitive position. It is argued that limited attention is paid to aspects such as product design and dimensions of quality. Even less attention is given to service quality in an era where the level of competition has intensified (Ahmada, Ihtiyar & Omar, 2014; Camarate, & Brinckmann, 2017; Glowa, 2014). Without service quality, the banking institutions may fail to deliver on a critical strategic milestone which is financial inclusion. Financial inclusion involves improving the choice, quality and accessibility of financial services and products to the traditionally unserved, underserved and financially excluded. Values of financial inclusion include access, affordability, appropriateness, usage, quality, consumer financial education, innovation and diversification, as well as simplicity.

Parasuraman *et al.*'s (1988) study developed a gap analysis model that seeks to measure the influence of service quality based on the integrated view of consumer-company relationship. This model refers to dimensions of service quality - tangibility, reliability, responsiveness, assurance and empathy. For example, if consumers perceive that the implementation of quality dimensions in executing daily functions, this will

strongly fulfil their needs and expectations. This situation may lead to induced positive consumer behaviour. The essence of this perspective is strongly support by the service quality research literature (Ismail & Yunan, 2016).

With an increase in factors such as foreign-owned banks and social media the level of options to banking consumers have increased. This has primarily been promulgated by digital technology resulting in greater responsiveness and flexible solutions to consumers (Sundaram, 2014). We are in an age where the consumer focus is strategically linked to performance in the banking industry (Sundaram, 2014). Until the advancement of technology very little focus was placed on the consumer and these efforts were largely disjointed. This was because the big banks had a monopoly in South Africa and they found little use in analyzing data and consumer feedback to bring about improved products and services. There was, however, differences between the levels of service quality between branches but this was due to initiatives that were unique to some (Quyet, Vinh & Chang, 2015). Some branches provided better service by building a *rapport* with consumers over the years. Although such repeated interactions enabled bank staff to develop intimate knowledge about consumers and enabled the bank to offer consumers personal attention, this knowledge was not shared with the institution and was certainly lost when the employees moved out. In addition, this was not an integral component of the organizational culture (Wang, Lo & Hui 2003).

Services are now more frequently measured by the consumer through a lens looking at professionalism, technology, infrastructure, knowledge and satisfaction, to mention but a few. Samli & Frohlich (1992) argued that service quality is directly related to success and to sustainability in today's competitive banking environment. Older sources in the literature suggest that gaining consumer loyalty is of paramount importance and the costs of retaining consumers are lower than the costs of acquiring new consumers (Dick & Basu, 1994). Measuring service quality may be complex as certain characteristics such as reliability, tangibility, assurance, responsiveness and empathy, are not easy to determine. For this reason indirect methods are employed in an attempt to determine perception of consumers (Tsoukatos, & Mastrojianni, 2010). This situation becomes more complex if we refer to the services area, the offer of which greatly defines our times (service society). Such complexity lies in the specific characteristics of the services, such as intangibility, heterogeneity and simultaneity, which hampers their control, by the bank, and the assessment of their services, for which indirect methods are normally used, through client perception (Hinson, Mohammed & Mensah, 2006). Also, the determination of the quality of services of the selected bank is not on record. This drives the realization of the investigation which will use a quantitative approach. In that sense this work will analyze the user perception of the quality of services provided by the bank with a specific focus on multiple major branches in Cape Town. In this regard my study will contribute towards a conceptual foundation for investigating service quality of the selected bank.

The banking industry has become very competitive, with increasing options available to consumers. The competitive environment has increased due to emerging businesses in the financial services industry. Businesses that originated without a background in formal banking has explored these new opportunities. This has continually changed the state of the financial services industry in South Africa. In particular, digital technologies, low-cost operating models and supply-chain integration have changed the banking environment significantly. This has resulted in these emerging businesses seeking new opportunities, such as improved online services to consumers (Ernst & Young, 2012). The emergence of non-traditional players in the market has had a profound effect on the banking environment. With more options available to consumers, the traditional banks in South Africa were forced to respond. In response to this threat in the environment, the 'big banks' (Barclays Africa, Standard Bank, Nedbank and FirstRand) are attempting to find new ways to perpetuate their dominance in the market (Camarate & Brinckmann, 2017).

Some of the innovative ways of improving current approaches has included looking at key operational trends like digital transformation and mining of big data. By prioritizing the aforementioned operational elements, the banks could develop improvements to existing service offerings to consumers. In this way they could compete more effectively with the new entrants in the market. The discernable difference between the 'big four banks' and the emerging players are that the former has developed a sizable market share in the sector with particular reference to business and corporate banking consumers. In an attempt to maintain this

advantage in the market these, banks need to develop more effective ways of data mining and other forms of analyses in order to find efficient ways of maintaining market share.

Traditionally, the South African market has been profitable to the big banks. With the emergence of newer players not only has the banking landscape changed, but also the level of profitability. The three primary factors that have emerged in the market are:

- The emergence of digital technologies at lower operating costs initiated by emerging businesses such as financial services players (e.g. Discovery);
- The emergence of sector and industry-specific banks, closely integrated with broader supply chains, initiated by parastatal organisations such as the South African Post Office); and
- On-going transformation of the big banks to address changing consumer, regulatory and technology needs (Capgemini, 2012).

It is in this context that the financial services industry, as a whole, is rapidly evolving towards a far more open market. In the past decade the market has seen the inclusion of emerging players diversifying financial services offerings by introducing digitally-enabled banking solutions to provide better consumer experience at a lower cost. In the past, insurance companies and loan providers were known for offering mass-market insurance and finance to individuals and existing businesses. With digital technologies, however, financial service companies reshaped their offerings and entered the banking market.

Over the past few years, also, insurance companies have diversified their offerings. This included offering lending and savings schemes. Examples include Discovery's credit card facility as well as Old Mutual's Money Account that also acts as a transactional and savings account. Discovery also plans to start a retail bank which signifies a direct move to compete with the big banks (Camarate & Brickmann, 2017). The current era represents a time where organizations are trying to understand changing consumer preferences in relation to digital technological solutions. The supply chain in the existing banking sector was influenced by the emergence of new players. These companies have identified gaps in the industry and the need for more personalized services offered at lower prices. The literature suggests that in business banking the taxi industry presents an example of new opportunities that are unique to modern day banking. The business needs of taxi operators appear to be uniquely positioned. One of the growing concerns of taxi operators is the high interest rate charges and limited access to finance. While the big banks have not responded to such changes in the economy and emerging industries, new players have filled such gaps. In real terms the financing needs of taxi operators exceed R40bn which primarily includes new vehicles. The historic interest rate charges offered by the big banks ranged between 16 - 18.5% which was too costly for the industry (Goldstuck, 2012).

The aforementioned represents a classic example of the manner in which the big banks continued to do business in South Africa. The emerging players in the industry identified these gaps and were more responsive. In addition, the collaboration of new players such as PEP and Post Bank created new challenges to the traditional banking industry. The combined real estate of PEP and Post Bank exceed that of the big banks collectively and have a wider network including areas where some of the larger banks have little to no presence (Capgemini, 2012). Due to such advantages the emerging players can leverage existing distribution channel networks and can therefore compete far more effectively. This, then equates to newer offerings, with a wider range of products and services at lower rates. The fact that such institutions can operate on a leaner basis and be more responsive to consumer requirements has raised new concerns for the big banks. Another aspect in the business environment includes analyzing consumer data in an attempt to expand the client base. Many large organizations have been examining data in order to influence repeat purchasing as well as the retention of consumers. This includes offering loyalty or rewards programs in an attempt to make product/ service offerings more attractive. Financial services companies, particularly in the insurance sector have started to offer savings and investments schemes based on data mining strategies.

The big banks in South Africa, instead of having a proactive stance in its strategic plan, are now reacting to advancing disruptive technologies. In this regard they have incurred major investments with regards to digital technologies. In addition, far more emphasis has been placed on consumer satisfaction and consumer needs. The strategic plan now includes ways of improving risk management; operating more cost-efficiently

and also enhancing client centricity through targeted products and improved on-boarding tools or channels. There have been major changes as a result of consumer changing requirements, policy and technology (Schiuma, 2017). Some of these include the implementation of emerging technologies in order to evolve or replace legacy systems, a strong focus on cyber and information technology, and digitizing front and back-office operations. At the same time consumer needs are placed at the forefront when compared to the past, particularly through electronic channels (Camarate & Brickmann, 2017).

The market is opening up far more as a result of changing trends. The market share that the big banks have occupied traditionally, has been eroded with segment-specific challengers, with a variety of competitors capturing a significant share of the industry. The big banks have to become more innovative and responsive in the industry as technology continues to play a major role. The market share of the big banks will continue to be eroded by the emerging players. It is therefore essential for banking operators to understand changing present consumer requirements and to anticipate future needs.

Theoretical Framework
The theoretical framework consists of four independent variables namely people, processes, technology, policy and the dependent variable, SERVQUAL. In recent times the nature and quality of services provided to consumers depend on the expectations of the consumer. Over time the nature of services tend to change in line with changing consumer preferences. Management's responsibility, in turn, is to ensure the achievement of such expectations. In banking this is no different and the emphasis is probably more so, for management, to ensure that it can meet changing consumer demands and expectations. At the heart of monitoring and ensuring successful implementation of acceptable level of services, policy formulation is very important. The quality of services implies two essential aspects that a manager has to take into account: the client's satisfaction and the absence of the errors made by employees. One of the important policy measures in the modern bank is to ensure best practice regarding quality management. Introducing a system of quality management has the goal of satisfying the clients and surpassing their expectations. In order to maintain such a system it is essential to be able to continually monitor the level of service quality. The system must be flexible and dynamic in order to adapt to changing preferences and needs. The principles of quality management policy in banking institutions must incorporate consumer orientation, leadership, personnel involvement, a procedural approach, a systems approach to management as well as continuous improvement in developing mutually beneficial service provider-consumer relationships (Gupta, *et al.* 2016).

People are at the centre of engagement, by providers, with consumers. In modern times the role of people has become equally important when compared to financial performance. A dynamic element of the marketing mix is people (Paille, 2012; Carrel, *et al.* 1995). In the eyes of the consumer, when they engage with banking staff, good training and motivated employees are elements of the organizational image (Ikramullah *et al.*, 2012). This is because employees' good behaviour or the non-existence thereof, affects how the consumer perceives the service provider and the quality of service they are provided with (Paille, 2012). Contented employees provide a more efficient service to consumers and through this they help to build consumer trust, promote company benefits and evaluate the organizational performance in terms of quality service delivery (Meyer & Allen, 1991).

Process and the quality of effective and efficient delivery are synonymous in banking. Process is the actual procedure, operation or activity taking place in order to deliver the service. There is a direct impact, of management's understanding of banking processes, on the way that it meets consumer needs and requirements (Gupta, *et al.* 2016). For any consumer to make an informed decision the operational flow becomes very important. When services become more specified, the importance in the process becomes more evident (Wang, *et al.* 2014). As a result of the diversified market in the banking industry, not only are the big banks adversely affected, but there is also the advancement of foreign banks competing in the market. It is becoming more important, therefore, to enhance the competitiveness of traditional banks. Securing the competitiveness of the big banks, in particular, is important for successful banking reform. The reform of historic strategies by traditional banks is important as the arrival of new entrants erodes profitability. In this regard the processes must be assessed in an attempt to reduce unnecessary costs and to improve overall efficiencies in banking operations. This involves the review of the execution of processes with regards to

consumer satisfaction and services quality (Wang, *et al.,* 2014). Initiatives and measures to determine operational efficiency, however, is often not done consistently (Fethi & Pasiouras, 2010). Contemporary research indicates that it is essential to determine the gaps regarding processes in the bank and operational efficiency. Equally it is important to determine not only what the gaps are but the type of intervention that is required (Chang, *et al.,* 2017).

The banks that enhanced their technology based systems are the leaders in the industry, as these enhancements have changed the views of consumers towards service delivery. With the development of internet banking platforms, consumers' views of the banking industry have changed as consumers were very happy with the introduction of these platforms. This has placed much pressure on the banking industry to keep developing new platforms of high tech services for consumers to interact with them. High touch services are generally dependant on individuals in the servicing process producing the service where high tech service is mostly and predominant an automated one. High touch services include physical resources and technology based systems that are managed and integrated into service processes. The level of advancements in technology in the banking industry has, however, been largely disruptive. Newer technologies have also been afforded to the masses due to developments in mobile technology (McIntyre, *et al.,* 2017; Nimish *et al.,* 2015). This is why services in the banking industry include both high touch and high tech services.

Defining service quality is an action or activity which can be offered from one party to the other party (Agyapong, Agyapong & Darfor, 2011). Parasuraman *et al.*'s (1988) study developed a gap analysis model to measure the influence of service quality based on the integrated view of the consumer-company relationship. The model refers to dimensions of service quality - tangibility, reliability, responsiveness, assurance and empathy. If consumers are of view that the implementation of quality dimensions in executing their daily functions, for example, will strongly fulfil their needs and expectations, this situation may lead to induced positive consumer behaviour. The essence of this perspective is strongly supported by the service quality research literature (Ismail & Yunan, 2016). Current research uses direct effects models to examine service quality in different service based organizations. Findings suggest that the when service providers practiced high levels of quality relating to tangibility, responsiveness, reliability, assurance and empathy in performing their daily job functions, this resulted in positive consumer perceptions. (Al-Borie & Damanhouri 2013; Ozturkcan, Aydin, Ates & Cetinet, 2009; Ismail, Zaki & Rose 2016; Baldwin & Sohal, 2003; Hussain, Nasser & Hussain, 2015; Rao Kondasani & Panda 2015).

3. Methodology

The study followed a quantitative approach with a cross sectional research design (Collins & Hussey, 2009). Our approach for this work is to understand the phenomenon of service quality in the banking industry and to contribute to research in this area. Two concepts strongly associated with research approaches include epistemology and doxology. Epistemology relates to known facts about what is regarded as the truth whereas doxology relates to subjective interpretation of the truth. Epistemological thinking has always been subject to change as the nature of problem diversity increases. Two major research schools of thought that have emerged include the positivist and the interpretivist perspectives (Galliers, 1991). For purposes of this study we employed a positivist stance in understanding the phenomenon.

Purposive sampling was considered for the study due to the fact that it encompassed a select group of participants. It, however, had the disadvantage of possibly leading to higher levels of bias, creating the inability to generalize findings from the study (Dudovskiy, 2017). Convenience sampling was used for this study which entailed subject selection that was based on their accessibility and proximity to the researcher. The research participants for the study included a cross section of banking consumers (limited to two branches) who used the bank for personal and business banking services. The primary data was collected from a sample of 100 participants, of which all were polled using a questionnaire. After the questionnaires were received from the participants, the data was entered into Excel. The data was then exported into SPSS v20 for data management and analysis. Due to the technical complexity of gathering data together with a high non-response rate in studies undertaken in the banking industry, a purposive sample of 150 respondents was targeted from both branches. The final sample size of 123 was adequate in order to provide reliable and valid

data to answer the research questions and also to develop generalizations about the study phenomena (Hair *et al.*, 2010). The selection of the sample was conducted in conjunction with consumer relationship management in the branch. As the bank could not make a database available due to the bank's policy, I was assisted by management in accessing a pilot sample.

This procedure is explained below. Conducting a survey in a banking environment has proven to be challenging considering the sensitivity of money and financial information. As a result of the sensitivity, banking staff initially communicated the purpose of the study to potential consumers who entered the bank. After this initial screening process, the consumers were assigned to a room where the survey was conducted. In this regard, a convenience sampling technique was used for the purposes of this study.

The primary method of data collection included a survey, using a structured questionnaire which the participant completed with appropriate and clear instructions. The researcher obtained permission from management to conduct the research study and also to approve the data collection procedures, where applicable. In addition, the researcher obtained informed consent from all participants prior to the commencement of the study. The researcher chose a quantitative approach, to achieve the objectives as set out by the researcher. The questionnaire formed the primary quantitative data collection instrument, as surveys and questionnaires were mainly used to gather this type of information. The questionnaire was used to collect data on the perceptions and understanding of participants towards service quality of the bank, particularly reliability, tangibility, assurance, responsiveness and empathy. Additionally, the researcher attempted to investigate a series of service delivery perceptions based on their personal experiences, information gathered from their surroundings and reactions to observed system dysfunctions.

4. Results

Table 1: Frequency and Percentage distribution of the Personal background of the respondents

Characteristics of the respondents	Frequency	Percentage %
Gender:		
Male	69	69%
Female	31	31%
Total	100	100%
Age		
< 25	20	20%
26 – 30	24	24%
31 – 40	23	23%
41 – 50	19	19%
51 – 60	11	11%
61 – 65	1	1%
>65	2	2%
Total	100	100%
Branch		
Canal Walk	41	41%
N1 City	59	59%
Total	100	100%
Employment Status		
Employed full-time	76	76%
Employed part-time	9	9%
Student	3	3%
Unemployed	3	3%
Retired	6	6%
Other	2	2%
Total	100	100%
Number of years as a consumer		
0 – 5	36	36%

Characteristics of the respondents	Frequency	Percentage %
6 – 10	31	31%
11 – 15	9	9%
>15	24	24%
Total	100	100%
Reason for banking		
Personal	72	72%
Business	11	11%
Both	17	17%
Total	100	100%

The majority of the participants were male consumers. This is represented by 69% male consumers compared to 31% female consumers in the survey. The majority of consumers comprised people under the age of 40. The age category 26 to 30 is represented by 24%. The age category 31 to 40 is represented by 23%. The age category under 25 is represented by 20%. The majority of the participants were from Canal Walk branch and this comprised 59%. Most of the participants are employed persons, representing 76%. Part-time employed persons comprised 9%. The category, "other", is represented by self-employed persons and comprises 3%. The majority of the participants indicated that the main reason for choosing the bank was for personal banking and this is represented by 72%. Participants that indicated business banking as a reason for choosing the bank is represented by 11%. Consumer loyalty is an important parameter for modern day banking. Consumers who are banking with the bank for more than 10 years are represented by 34%. New consumers are represented by the category "0 to 5 years" and this comprises 36%. Equally important, are consumers banking for more than 5 years (6 to 10 years) and this is represented by 31%.

Figure 1: Top 5 Characteristics in the Bank
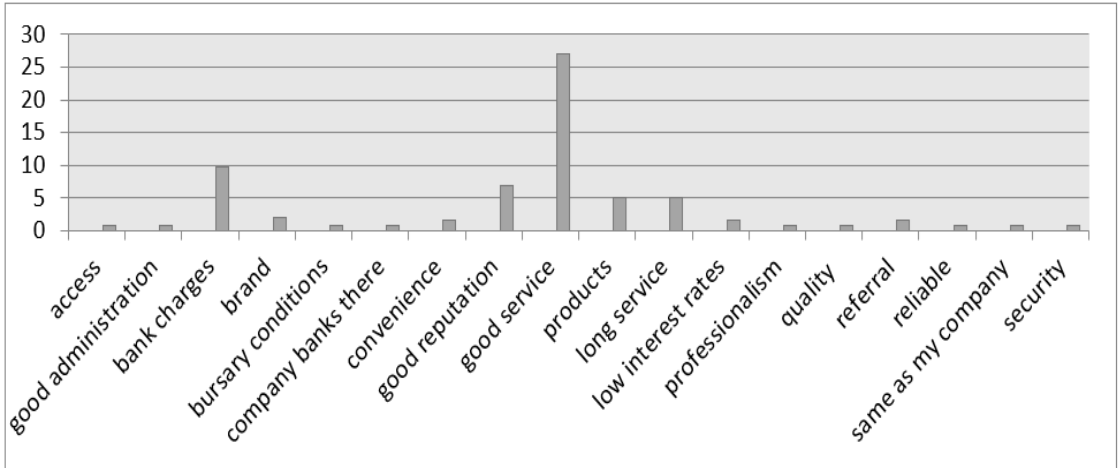
Participants indicated that good service is the main characteristic associated with the bank and this is represented by 27%. Bank charges were indicated as the second most important characteristic associated with the bank and is represented by 10%. The third most important characteristic is a good reputation and this is represented by 7%. Long service and products are listed as the fourth most important characteristics and are represented by 5%.

Table 2: Regression on SERVQUAL variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,524(a)	,274	,250	,676	,274	11,147	4	118	,000
2	,695(a)	,483	,466	,642	,483	27,598	4	118	,000
3	,701(a)	,491	,474	,705	,491	28,468	4	118	,000
4	,722(a)	,521	,505	,610	,521	32,142	4	118	,000
5	,671(a)	,450	,432	,658	,450	24,164	4	118	,000
6	,784(a)	,614	,601	,601	,614	46,944	4	118	,000
7	,838(a)	,703	,693	,397	,703	69,762	4	118	,000

In the first phase, the independent variables, namely people, process and policy, were regressed against the dependent variable, physical appearance. The regression model indicates that the independent variables explain 25% of the variance in the dependent variable (r = .25; p < .05). In the second phase - the independent variables, namely people, process and policy, were regressed against the dependent variable, reliability. The regression model indicates that the independent variables explain 47% of the variance in the dependent variable (r = .47; p < .05). In the third phase, the independent variables, namely people, process and policy, were regressed against the dependent variable, empathy. The regression model indicates that the independent variables explain 47% of the variance in the dependent variable (r = .47; p < .05). In the fourth phase the independent variables, namely people, process and policy, were regressed against the dependent variable, assurance. The regression model indicates that the independent variables explain 51% of the variance in the dependent variable (r = .51; p < .05). In the fifth phase the independent variables, namely people, process and policy, were regressed against the dependent variable, responsiveness. The regression model indicates that the independent variables explain 43% of the variance in the dependent variable (r = .43; p < .05). In the sixth phase the independent variables, namely people, process and policy were regressed against the dependent variable, tangibility. The regression model indicates that the independent variables explain 60% of the variance in the dependent variable (r = .60; p < .05). In the seventh phase, the independent variables, namely people, process and policy, were regressed against the dependent variable, SERVQUAL. The regression model indicates that the independent variables explain 69% of the variance in the dependent variable (r = .69; p < .05). In the context of the study, this means that the independent variables, people, process, technology and policy consistently and significantly explain the variation in the dependent variable, SERVQUAL.

Analysis
Physical appearance (PA) represented the first SERVQUAL factor and consisted of five rating scales. Whilst factors such as PA1 and PA3 were rated moderate to high, PA5 had the lowest rating. PA represented additional services and represents a vital area for consideration. Intangibility implies that a consumer's perception of quality is often based on physical evidence and price rather than the core service. Physical evidence refers to the environment in which the service is delivered and where the firm and the consumer interact and also any tangible commodities that facilitate performance or communication of the service. This demonstrates that the physical evidence of a health care service production process can influence the service experience as demonstrated in other studies (see Schiuma, 2017). Physical appearance can therefore be seen as a solid dimension to determine services quality – physical facilities, equipment, personnel etc. (Camarate & Brickmann, 2017).

Reliability represented the second factor of SERVQUAL and comprised of eight items. This factor measured the bank's ability to dependably and accurately deliver the specified services. R6 represented the bank's ability to address and to solve queries quickly. In modern day banking one of the key performance indicators is to reduce queuing times. To this extent the bank attained a moderate to high rating. However, R3 measured the ability of the bank to fulfil services spontaneously and received the lowest rating. R3 would therefore represent a perspective to prompt management to integrate this factor into the key performance indicator

dashboard. This finding supports recent studies that used the SERVQUAL models in evaluating services quality in the banking industry (Hwang, Jun, Chang & Kim, 2017; Schiuma, 2017; Fethi & Pasiouras, 2010). These studies concluded that managers in banks can benefit from a greater understanding of product quality and services quality and in this way enhance the bank's reputation.

Empathy comprised six items and represents the third SERVQUAL factor. Empathy measures the ability of the bank to show caring and individual attention to the consumers. E1 received the highest rating and determined the level of care displayed by the bank. E3, however, received the lowest rating and measured the level at which the bank arranges working hours in relation to the consumer needs. The gap between these two factors is clear and demonstrates the varying levels of care practiced by the bank. Empathy has been shown to relate strongly to consumer satisfaction (Schiuma, 2017; Fethi & Pasiouras, 2010). It is important to understand and to clarify the definition of consumer satisfaction. This concept refers to happy consumers with more complex forms of satisfaction. As emphasized earlier, although this study did not directly measure consumer satisfaction, it did measure loyalty. Studies have linked consumer satisfaction to loyalty and this has become widely acknowledged in modern day organizations and commerce (Chang *et al.*, 2017). The importance of empathy is that it is typically linked to business performance with regards to a company's products and services as a result of a specific focus on the consumer. In this regard the introduction of empathy can be linked to contemporary studies (Chang *et al*., 2017).

Assurance represented the fourth factor of SERVQUAL and comprised four items. A4 represented the consumers' sense of feeling secure and received the highest rating. Conversely, A3 received the lowest rating and measured the staffs' ability to be courteous. Assurance is a construct that is directly associated with people. People in the workplace, in turn, are commonly associated with both performance and turnover (see Capelli, 2004). Other studies have linked assurance to knowledge. Knowledge workers of the 21st century display occupational, rather than organizational commitment; possess skills that are in high demand, and are characterized by high mobility (Horwitz, Heng & Quazi, 2003). Friedman, Hatch & Walker (1998) opine that the idea of 'a job for life' has become an 'oxymoron'. The situation has changed so much in recent years, that Capelli (2004) has described this change in retention as moving from tending a dam to managing a river: "… the aim is not to prevent water from flowing, but to control its direction and speed'.

Responsiveness represents the fifth dimension of SERVQUAL and measures the bank's eagerness in aiding consumers and in providing expeditious service. This factor is all about ensuring excellent service. RE2 measured the level of confidence that consumers have in the bank and this received the highest rating. RE3 measured the ability of staff to show willingness in order to assist consumers. This factor, which should be a key component of services quality, received the lowest rating. As indicated in the literature, the emergence of non-traditional players in the market has had a profound effect on the banking environment, placing increasing pressure on the bank to excel in areas such as responsiveness. With more options available to consumers, the traditional banks in South Africa were forced to respond. In response to this threat in the environment the 'big banks' (Barclays Africa, Standard Bank, Nedbank and FirstRand) are attempting to find new ways to perpetuate their dominance in the market (Camarate & Brinckmann, 2017).

Tangibility comprised four items and measured the quality of materials, equipment and quality of information received. T1 received the highest rating and represented the appeal of the facilities. T4 received the lowest rating and measured the quality of information received from banking staff. It has been argued that the single most important difference between services and products is the characteristic of intangibility and this has a significant influence on the marketing management of services. Other studies have also linked tangibility to consumer loyalty, a concept that is commonly understood as a consumer exhibiting behaviour of repeat buying which in turn is perceived as an indication of the level of attitude toward the quality of the service (see Deng, Lu, Wei & Zhang, 2010; Gede & Sumaedi, 2013).

The literature suggests that technology has had a disruptive effect on banking and banking processes (McIntyre, *et al.* 2017). Technology has been introduced in this study as an independent variable where the effect was measured against service quality. It is evident from this study that technology has influenced the level of service quality. Its effects should also be determined against other variables. The big banks, for example, have responded to emerging technologies by migrating from physical channels and effectively

downsizing branch networks. This is not merely a phenomenon in South Africa but is experienced globally. Are these measures taken by the big banks, however, sufficient considering the magnitude of technology development?

In phase one, correlation was used to determine the strength of association between the independent variables, namely people, processes, technology, policy and the dependent variable, SERVQUAL. Generally, the independent variables, moderately to highly, correlated with the SERVQUAL variables. This finding is in line with contemporary studies in service marketing and indicates that consumer loyalty is associated with service quality and consumer satisfaction (Muahmmad *et al.*, 2015; Kitapci *et al.*, 2013). Such studies have been used in determining consumer perceptions in measuring consumer perceptions. This has been particularly prevalent in studies focusing on retail businesses. These studies indicate that the ability of service providers to implement high levels of intangibility, responsiveness, reliability, assurance and empathy in job functions strongly influence consumer satisfaction and consumer loyalty (Bei & Chiao, 2006; Sivadas & Baker-Prewitt, 2000).

In phase two linear regressions were used to establish a predictor model for services quality in a banking environment. In principle regression was used to predict the value of a variable based on the value of another variable. People, technology, process and policy were regressed against the dependent variable, physical appearance to determine to what extent the variance can be explained. As reported in the results, the regression model indicates that the independent variables explain 25% of the variance in the dependent variable (r = .25; p < .05), which represents the lowest variance when compared to the other SERVQUAL constructs. In contrast to the sixth phase, the independent variables, people, technology, process and policy were regressed against the dependent variable, tangibility.

The regression model indicates that the independent variables explain 60% of the variance in the dependent variable (r = .60; p < .05) which represents the highest variance compared to the other SERVQUAL constructs. However, when the independent variables were regressed against the combined variable, SERVQUAL, 67% of the variance in the dependent variable could be explained. In this regard, one can conclude that the independent variables are good predictors of variation in services quality in a banking environment. The development of newer technologies has had a profound effect on the level of services quality provided by the traditional banks. Studies have indicated that this has been particularly the case as a result of insurance companies diversifying their offerings over the past few years (Camarate & Brickmann, 2017). This included offering lending and savings schemes. Examples include Discovery's credit card facility, Old Mutual's Money Account, which also acts as a transactional and savings account. Discovery also plans to start a retail bank which signifies a direct move to compete with the big banks (Camarate & Brickmann, 2017). The current era represents a time where organizations are trying to understand changing consumer preferences in relation to digital technological solutions.

On another level, the literature identified major changes as a result of consumer changing requirements, policy, people, processes and technology (Schiuma, 2017). A more prominent key performance feature, is attaining excellent consumer service levels. In this regard far more emphasis has been placed on consumer needs and aligning such needs to service levels (Schiuma, 2017; Camarate & Brickmann, 2017).

5. Recommendations and Conclusion

Regular Assessment of Service Delivery by Customers: By enquiring from existing and prospective consumers, the level of satisfaction on the SERVQUAL dimensions of the banking services, the bank will be informed on the relevant areas that require improvement in order to enhance the level of service performance. It will also inform the Bank on areas that have been given less attention, so that a decision will be made to upgrade or to improve those areas.
Service Quality Dimension Improvement: It is recommended that since the service quality dimensions generally met the consumers' expectations, certain service quality dimensions need a pragmatic effort, within the bank, to ensure its improvement from moderate/ good to excellent. With regard to service dimensions such as responsiveness and empathy, an effort is also needed to ensure an improvement in these dimensions. This will help in the overall service quality and may lead to better consumer service delivery in the bank.

Longitudinal Design Research: Participants were asked about which factors they value the most when choosing a bank. The factor that was most valued by participants was good service. With an increase in new entrants in the industry alongside newer technologies, it is important for the bank to commission follow up research on a longitudinal basis.

Empathy and Responsiveness: The findings indicate that the two factors, empathy and responsiveness require investigation. Factors relating to responsiveness such as "Staff does not always show a willingness to assist consumers" must be addressed as this relates to a vital component of consumer service. This measure is of particular importance relating to frontline staff that interacts directly with consumers. Factors relating to empathy such as "The bank arranges its working hours accordingly to the consumer needs" must be addressed as this item indicates that it is lagging behind relative to the remaining items. Perhaps more flexibility, such as extending trading hours, is needed relating to these specific branches within the bank.

Improve overall service delivery: While the SERVQUAL dimensions indicate a moderate to good level of services quality, there are areas that must be reviewed in line with excellent service levels. Additional studies must therefore be commissioned to include other branches in the region in order to conduct comparative analysis of services levels. The bank is required, by this finding, to consider repackaging and redesigning of its service operations to match up with consumer expectation. This can be done by finding out from consumers what they expect from the bank and providing accordingly. By this consumers will be compelled by virtue of superior service to stay than switching to a competitor.

Conclusion

The findings of this study have a direct influence on marketing management and the manner in which the bank promotes products and services with a specific focus on people, process and policy. The marketing manager in the banking industry will play a key role in reflecting on the current marketing strategy, in line with the gaps in service provision. It is pertinent that all the components of service quality be implemented effectively in line with changing consumer preferences. Marketing managers should not only focus on financial data which tends to be historic, but must also look into changing consumer needs. The marketing manager should involve all levels of staff in meeting such changing consumer preferences more effectively.

This study attempted to illustrate the factors that might affect service quality in the retail banking sector in South Africa. The current study, however, has some limitations. The impact of certain environmental variables and their influence in shaping service quality need to be further explored. This study also does not separate the population sample into separate geographical locations. For instance, a person who lives in a remote place (and who may lead a more simple life) may have a different expectation of, and perception towards, consumer services offered by banks, also possibly owing to differences in culture, levels of education as well as other demographic factors.

The study was based on two branches that were selected for the study and the researcher was not able to provide input in the selection process. In some cases, consumers may have more time to spend in the waiting queue and their tolerance level is higher. Sometimes, people living in remote places may not be familiar with the ATM and cash deposit machines, or some other problems which may have been experienced in the city for decades. This study has proven that SERVQUAL is an effective model to measure services quality in the retail banking sector. Managers from various banks should continuously measure and improve the level of services quality using SERVQUAL in order to maintain high levels of competitiveness in the market place. Consumer perception can change rapidly and it has become critical for management to review data on a longitudinal basis.

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Paper 23

A critical evaluation of the effect of training on employee performance in the Oranjemund Town Council in Namibia

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Abstract: Training of Town Council staff should equip them with relevant knowledge and skills to perform at the required standard; but this is sometimes not the case. The aim of this study is to provide insight into the effect of training on employee performance in the Town Councils in Namibia using the Oranjemund Town Council as a case study. This study adopted action research in studying the population of 47 Oranjemund Town Council employees. A questionnaire (open-ended and closed-ended questions) was used as a data collection instrument in addition to observation. The findings of the study were that there was shortage of skilled workers at Oranjemund Town Council and that the shortage was so serious that the Town Council struggles to deliver the necessary services to the community. The majority of the respondents were of the opinion that training offered at Oranjemund Town Council is not enabling employees to perform to the required standards because managers do not allow those who had undergone training to use the new skills acquired to make changes and improve performance. The content of training is also not periodically upgraded to ensure employees keep abreast the latest skills to perform well on their jobs. To overcome these challenges, line managers should offer after-training support to employees to encourage them implement new ideas and acquired skills to improve performance. Training should be practical, periodically evaluated and upgraded.

Keywords: *Effectiveness, importance, training programmes*

1. Introduction

The subject of training and its effects on employee productivity and organizational performance have attracted considerable interest and debate in the 21st Century (Malaolu & Ogbuabor, 2013). Researchers have produced a plethora of analytical and empirical literature on the subject matter (Malaolu & Ogbuabor, 2013). Researchers have maintained that training has an effect on employee productivity and organizational performance. However, theoretical predictions made by some of the researchers had not articulated the process from training to improved productivity and better performance; some have argued that the productivity of employees and the performance of an organization are based on an innovative labor force, technology, quality management and customer satisfaction (Nangobe, 2016).

In contrast, other researchers perceive training as a tool in the hands of human resource managers to activate and empower the productive base of an organization (Malaolu & Ogbuabor, 2013). It is further argued that training is vital to productivity and organizational performance because formal education systems do not provide adequate, specific and critical job skills for positions in particular organizations. Organizations, therefore, have to determine training interventions to ensure that employees are equipped with the requisite skills, knowledge and attitudes through a training-needs analysis process (Meyer *et al.,* 2012). The shortages of experts and specialists in different occupations in local authorities and town councils in Namibia have persisted since independence in 1990. Empirical studies on decentralization in Namibia have suggested that the shortcomings in service delivery in several local authorities and town councils are the result of lack of skilled personnel (Mutumba, 2010).

A study conducted by the National Planning Commission and the Ministry of Regional and Local Authorities in 1998 confirmed that local authorities and town councils in Namibia lacked skilled and trained personnel in

key areas, such as technical operations, finance management, customer relations, etc. (Katuuo, 2014). Local authorities and town councils were then advised to make use of training to address the issue of shortages of experts and specialists in different occupations. The aim of this study was to investigate the effect of training on employee performance in the Namibia Town Councils, using Oranjemund Town Council as a case study.

This paper will tease out the following questions: What is the level of the shortage of skilled workers at the Oranjemund Town Council? What is the effect of training on employee performance at the Oranjemund Town Council? What challenges does the Oranjemund Town Council face with regards to training and what could be done to make training offered by the town council more relevant and effective?

2. Literature Review

In a survey conducted on six town councils, namely Grootfontein, Okahandja, Rundu, Ongwediva, Khorixas and Rehoboth, it was established that all the six local authorities were facing the same challenges of shortages of skilled personnel (Katuuo, 2014). The local authorities and town council were facing difficulties in implementing decentralized services efficiently and effectively because they lacked skilled personnel. Katuuo (2014) concluded that financial aid to town councils in Namibia, in the form of training assistance, should be increased to provide the means through which they can improve the skills of employees to improve performance. Local authorities in Namibia, specifically town and village councils, lack skilled personnel in finance and revenue management, technical operations, customer care and complementary commercial areas (Muluti, 2001; Katuuo, 2014). Furthermore, a number of qualified people do not want to work for local authorities, especially the smaller councils, because the remuneration packages are unattractive (Muluti, 2001). Some key skilled personnel, such as engineers and technicians, are leaving local authorities in search of greener pastures. As a result of a lack of financial resources, local authorities and town councils are failing to develop strategies to attract and retain skilled personnel in strategic positions.

Nangobe (2014) argue that when there is a shortage of skilled personnel in the organization, training is needed. Erasmus, Loedolff, Mda and Nel (2013) define training as the planned acquisition of knowledge, skills and abilities to carry-out a specific task or job in a vocational setting. Erasmus *et al.*, (2013) further argue that training is the way in which an organization uses a systematic process to modify the knowledge, skills and behaviour of employees to enable it to achieve its objectives. Training is task-oriented because it focuses on the work performed in an organization based on job or task descriptions. The job or task requirements determine the training standards for a particular job. Training therefore aims at improving employee performance in an organization. This occurs or is expected to occur usually when performance standards are low because of lack of knowledge and / or skills and / or poor attitudes among individual employees or groups (Erasmus *et al.*, 2013).

Meyer (2012) say training entails the transfer of specific skills to an employee so that he / she can perform a very specific job or task. Training is conducted when a specific training need has been identified such as a performance gap or the introduction of new technology which requires new skills (Buckley & Caple, 2014). For example, in the case of an accident, training would be expected to provide new specific skills, knowledge and attitudes to manage accidents in the workplace (Rahmati, Hosseinifard & Alimadadi, 2014). Training effectiveness must cause behaviour change (for instance, skill transfer for job performance), thereby resulting in organizational performance (Meyer *et al.*, 2012). The success of any training programme is determined by the end results and the application of theory to practice by the trained members of the staff (Meyer *et al.*, 2012). There is no training effectiveness when there is no impact in employee performance, attitude, skills, application and behaviour towards organizational goals (Buckley & Caple, 2014).

Employees are expected to perform better after training because the essence of training is to ensure that the skills gap is filled with additional knowledge acquired through training (Nangobe, 2014). The effectiveness of training under local authority is measured on how employees execute their duties towards clients, for instance the number of customers served per hour, number of complaints lodged against any member of the staff (Malaolu & Ogbuabor, 2013). To build a bond between training and performance, there is need to carry out a training-needs assessment (TNA). This means that for any training to be effective there is a need to find

out the gap between the desired and actual performance (Meyer *et al.*, 2012). Without this assessment, training may not bring about the desired change (Alan, 2011). Erasmus *et al.* (2013) argues that, "the difference between the actual and required performance in some specific area of operation where improved training is considered the most appropriate and economical way of eliminating the difference."

Based the above, one would say that, training is intended to fill a performance gap and then improves performance. However, it is important to note that, not all performance gaps can be bridged by training. A performance gap indicates a training gap (training need), "only if the development of appropriate knowledge, skills and attitudes would help to improve performance and therefore close the gap. This requires that the lack of appropriate knowledge, skills and attitudes by the employee is a primary or contributory cause of the performance gap" (Meyer, 2012).

Various studies conclude that training effectiveness emanates from highly qualified facilitators designing and presenting employee training programmes to contribute to improved performance (Nangobe, 2015). Naris and Ukpere (2009) highlight that, effective staff training programmes will improve staff performance. When the employee is well trained and after the training manages to apply the concepts and skills in the workplace and as such improve the performance of the organization that is what is called effectiveness of training (Naris & Ukpere, 2009). Managers should also support those who had undergone training to implement new skills they would have acquired (Naris & Ukpere, 2009). Most importantly, training must be evaluated and upgraded so that indications of effectiveness and its impact on performance can be determined (Rauner and Maclean, 2015). The design of training evaluation determines the confidence that can be placed in the results it produces but it should also be noted that no evaluation design can ensure that the results are entirely due to the learning programme. It is advised that the evaluator should use the most rigorous evaluation design possible to rule out alternative explanations for the training results (Erasmus *et al.*, 2013).

The challenges that local authorities experience in training include but are not limited to the following: Training cost, difficulties of having highly qualified trainers and educators, language barrier, training facilities, old aged employees, unqualified/less qualified employees, resistance to change by employees (Katuuo, 2014; Naris & Ukpere, 2009). Local authorities can use the following strategies to overcome the challenges that it experiences in training. These strategies include: source out private training institution for knowledge trainers, recruitment of young and new blood, introduction of Learning by Organization, employee involvement in every activities of the local authorities, seek for increased budget fund allocation from the ministry of finance (Katuuo, 2014).

3. Research Method

The first part of the study that is reported here adopted action research to investigate a population of 47 Oranjemund Town Council employees. A questionnaire was used as the data collection instrument. A total of 47 questionnaires were distributed at Oranjemund Town Council. The respondents were asked to complete and return the questionnaires on the same day to the researcher. Clarity was provided on any part of the questionnaire respondents did not understand. All the questionnaires distributed at Oranjemund Town Council were returned and fully completed. This represented a response rate of 100%, even though sound conclusions could be drawn from response rate of 67% of the sample (Welman *et al.*, 2011). Microsoft Excel was used to analyze quantitative data, while qualitative data was analyzed thematically.

4. Results, Discussion and Findings

Shortage of skilled and qualified staff in Municipalities is common in Namibia (Katuuo, 2014) and the Municipality in the small town of Oranjemund may not be expected to be different. It is, however, important to determine the perception of staff member on the impact of the shortages of service delivery. 53% of the staff members strongly agreed that there is shortage of skilled workers and it was severe enough to render services of the Oranjemund Town Council to the community ineffective and 34% agreed; 13% were not sure, but no one disagreed with the existence of the shortage and its effect on service delivery. This result confirms

that of Katuuo (2014) view that town councils in Namibia are facing the same challenges of shortages of skilled personnel, which adversely affects service delivery.

Empirical evidence from other studies suggest strong correlation between training and employee performance (Meyer, 2012; Erasmus *et al.*, 2013; Malaolu & Ogbuabor, 2013; Nangobe, 2016). This study wanted to determine whether the experience and perception of employees at the Oranjemund Town Council fit in with this observation. 47% of the respondents agreed that training offered to staff at the Oranjemund Town Council gives the staff opportunity to improve their performance; another 47% disagreed and a further 6% strongly disagreed. Most of the employees are, therefore, questioning the relevance of the training they are made to undergo. This requires rethinking of how training is provided to staff at the Town Council and especially the importance of after-training support.

Managers should support employees returning from training use the knowledge and skills acquired to effect changes in the tasks they perform at the Oranjemund Town Council. This seems not to be the case. Only 6% of the respondents agreed that managers support changes initiated by employees returning from training to improve their performance; 33% was not sure, 53% disagreed and 6% strongly disagreed. So, almost 60% of the employees feel that managers do not allow staff members who return from training to make changes to the work environment that will facilitate application of the knowledge and skills acquired. As Naris and Ukpere (2009) had argued, when line managers offer after-training support then knowledge and skills acquired could improve employee performance; otherwise will hold the view that training does not offered staff opportunity to improve their performance at work. The managers at the Town Council definitely need training in change management.

The contents of training should also be dynamic. That is, the contents of training provided to staff at the Oranjemund Town Council should be periodically upgraded in line with new knowledge and skills requirements. 36% affirmed that the contents of training were continuously upgraded, but 43% disagreed indicating that any changes made to contents were not conspicuous enough for most of the employees to notice and appreciate them. This explains why 21% was not sure of changes in contents of training. For the staff of the Oranjemund Town Council to embrace training in spite of the discouraging experiences they had had, suggestions for improvement should come from them to encourage ownership. The following are some of the suggestions staff members made on what could be done to make training offered by the Town Council more relevant and effective:
- A needs assessment of the skills and knowledge requirements of jobs for training to be task-specific;
- Views of employees should be sought in conducting the needs assessment of tasks.
- Contents of training to be evaluated at the end of each training session for improvements that ensure task relevance.
- After a training session, line managers should ascertain and document new ideas that could be implemented for performance improvement and ensure that these are implemented.

5. Conclusion and Recommendations

One of the main findings of the study is that there is shortage of skilled and qualified workers at the Oranjemund Town Council and it is on a scale that compromising the Town Council's service delivery to the community. This finding supports Katuuo (2014) view that other Town Councils in Namibia face the same challenges of shortages of skilled personnel. Also, there was hesitation about the impact training offered at Oranjemund Town Council is having on performance because managers do not allow changes to the work environment that would facilitate application of acquired new skills and knowledge. The prevailing situation therefore defeats the purpose of training and should be addressed. Also, given the dynamic nature of work, the contents of training should be periodically upgraded in line with job requirements for employees to acquire the latest skills and knowledge required to perform their tasks adequately.

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Paper 24

The cultural influence of Ubuntu on organisational commitment in the Hospitality Sector

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Abstract: Organisational commitment (OC) plays a dominant role as one of the main factors influencing relationships in the employee/employer and customer dyad. This fundamental relationship and its animating factors are often overlooked in the hospitality literature. The aim of this study was to explore the spectrum of OC and cultural dimensions by explicitly examining the influence of the four broad cultural values of *Ubuntu* on hospitality organisations. Compassion, group solidarity/collectivism, survival, respect, and dignity were identified as the most common antecedents of *Ubuntu*. Quantitative techniques were used in this study to collect and analyse large amounts of cross-sectional data from a sample of 212 frontline-managers. Exploratory Factor Analysis and Structural Equation Modelling were used to analyse the data, and the results showed that there was a significant relationship between *Ubuntu* values, facilitated by collectivism and managers' compassion, and OC. *Ubuntu* values promote the ideas of a community; *Umuntu-ngumuntu-ngabantu* correlated significantly with affective and normative OC dimensions. In conclusion, the study suggested that the values of *Ubuntu*, if consciously harnessed could play a pivotal role in elevating OC among frontline-managers and employees. Thus, the study identified *Ubuntu* values as unique contributors that increase understanding of person-centred approach to OC.

Keywords*: Frontline manager, hotel accommodation, organizational commitment, Ubuntu, service quality behaviour*

1. Introduction

There is a unanimous agreement in the organisational behaviour (OB), management, and service marketing literatures that, OC is an important research topic having both practical and theoretical implications (Browning, 2006; Little & Dean, 2006; He, Li & Lai, 2011; Dhar, 2015; Jaiswal & Dhar, 2016; Karatepe & Olugbade, 2016). Accordingly, the concept is known to benefit the organisation in many ways (Browning, 2006). Perhaps, this is because OB researchers, characterised the concept by: (a) "a strong belief in and acceptance of the organisation's goals and values; (b) a willingness to exert considerable effort on behalf of the organisation; and (c) a strong desire to maintain membership in the organisation" (Mowday, Porter & Steers, 1982). On the contrary, Becker (1960) viewed the concept as a result of an employee's tendency to "engage in consistent lines of activity". These early theories identified employee's recognition of (a) the magnitude of the costs and profits awareness involved as penalties when one leaves a job, (b) the time spent for acquiring non-transferable skills (tenure), (c) the seniority privileges (status), and (d) lack of alternative employment linked with individual-organisational transactions as important and distinctive dimensions of employee calculative OC. It is against this background that the conceptualisation of calculative commitment within the economic discipline was considered within the context of side-bets and economic exchange rationale theories (Becker, 1960; Ritzer & Trice, 1969; Stebbins, 1970; Stevens, Beyer & Trice, 1978). Economists within the economic discipline portrayed OC as an external expression of decision, meaning that the employee's recognition of costs (cost benefits) was a simple means to a desired end. These definitions suggest that employee OC can be understood, differently in terms of (a) frontline managers' attitudes and behavioural intentions involving time, and effort that would be lost if they leave the organisation or (b) personal meaning (identity) with the collective and the willingness to exert considerable effort (Burke & Reitzes, 1991). Thus, the emphasis placed by OB researchers differed in that it focusses on better understanding of OC from the viewpoint of employee's identification and involvement with the organisation, manager or co-workers, suggesting employees want to remain with and contribute towards the organisation.

Driven by the discrepancies and limitations found in extant OC literatures, this study drew from a fundamental understanding of OC as conceptualised in the literature, as well as from various models of OC found in the significant literature. Evidence exists to indicate that the side-bets theory did not examine the employee OC and identity those central to understanding why individuals make side-bets, and why certain lines of actions are valued (Meyer & Allen, 1984; Burke & Reitzes, 1991). The economist within the side-bet theory, and OB provided diverse concepts and theoretical perspectives that many empirical studies adopted, resulting in fruitful examinations. However, the variety of approaches had various drawbacks, which rendered it difficult to compare empirical findings. The range of approaches also introduced difficulties in potential collaboration between researchers. Besides, data was collected through different OC conceptions and measures, which brought methodological concerns such as inconsistent correlation coefficients (Meyer & Allen, 1984; Jaros, 2007; Tett & Meyer, 1993). Findings from such approaches and methodologies impede the global understanding of the employee commitment process. Following the recommendations of Tett and Meyer (1993) and Hofstede (1983), this study integrated various perspectives with the aim of constructing a solid and unified theoretical base. It located frontline managers' OC within the context of a people-centred (employee) approach, employee role identity, and work team solidarity. This context explained the reciprocal ties of frontline managers, not only to the organisation, but also to supervisors, team members, and their work-related activity. The study located frontline managers' OC within the context of South Africa, underpinned by Hofstede's (1983) notion of leadership abroad, cultural relativity of organisational practices, and the theoretical underpinning of *Ubuntu* values. Theories that underscore the value of *Ubuntu* in an organisation attempt to explain the South African frontline managers' identification and involvement with the organisation, co-workers, supervisor, and work-related activities such as commitment and service quality.

Researchers in the OB discipline have used motivational theories to investigate employee OC based on positive employee work experience characteristics category, and impact on employee behaviour or decisions. As these subjective theories involve cognitive processes underlying employee behaviour, they are deemed appropriate in explaining frontline managers' OC and behaviour towards service quality. However, it should be noted that there is also a growing trend found in the literature on African cultures, which connect between leadership and management, particularly within the South African literature (Battle, 1996; Broodryk, 2005; Karsten & Illa, 2005; Khoza, 1994; Mbigi & Maree, 1995; Mbigi, 1997; Poovan, du Toit & Engelbrecht, 2006). This suggests that, OC research tends to overlook the importance of *Ubuntu* as one of Africa's regional cultures, which according to Tutu (1994) is one of the gifts that Africa can give to the world. For the purposes of this article, *Ubuntu* is defined by Khoza (2005) as "an African value system that is characterised by caring, sharing, compassion, communocracy, and related predispositions". Studies identified that workplace diversity derived from a region's culture has a profound effect on organisational performance potentials (Mangaliso, 2001; Stinglhamber & Vandenberghe, 2003; Meyer, Stanley, Jackson, McInnis, Maltin, & Sheppard, 2012). This study proposed that the influence of *Ubuntu* on OC and work outcomes such as service quality behaviour would extend the dimensions that might predict employees' commitment to their respective organisation and would be useful to hospitality organisations. The main objective of this study was to explore the cultural influence of *Ubuntu* values on the OC and service quality behaviour of frontline managers in the South African tourist hotel accommodation sector.

The specific aims were to:
- Explore the literature on the influence of culture differences associated with Hofstede's (1980, 1983) individualism-collectivism dimensions on employee OC;
- Identify which attributes of frontline manager OC in *Ubuntu* practising communities should be developed to enhance service quality behaviour; and
- Encourage an extension of current research on OB and commitment research in order to increase the global understanding of geographic cultural influences such as *Ubuntu*.

2. Literature Review

OC perspectives
In the literature, OC has been analysed from several perspectives. Concepts and models within the OB literature seek mainly to explain the attachment and the identity of an employee to both an occupation and

the organisation. Theories within the OB perspective suggested that employee's identification and involvement with the organisation would be increased by renunciation mechanisms, which require organisational members to relinquish competing attachments (Burke & Reitzes, 1991). OC models in the OB literature were implicitly assumed to encourage affective committed employees to exert stable and long-term influences on behaviours that contribute to organisational goals, more so than influences exerted by less affectively committed employees (Steers, 1977; Wiener, 1982; Meyer & Allen, 1984; Allen & Meyer, 1990; Becker *et al.*, 1996). On the other hand, the fundamental argument of OC in the economics literature, which is represented by the exchange rationale (developed under expectancy/equity theories) has been that individuals perform for, or make contributions to, an organisation in exchange for certain rewards or inducements (Scholl, 1981). This perspective, according to Scholl (1981), signifies that employee membership and performance in the organisation may be maintained as long as a favourable inducement balance is maintained. Employee OC, in this sense, implies that an employee's assessment of equitable rewards would likely lead to their continued organisational membership and performance if there is a balanced ratio between inputs and outcomes as compared to those of others. Altogether, this OC perspective states that when combined with equity/expectancy theories, it can be predicted that individual employees would only engage in behaviour, such as work performance, if they perceive it to lead to a valued reward.

The continued development of the OC relationship studies prompted researchers between the 1990s and late 2000s to focus attention on model development within a multidimensional perspective (Allen & Meyer, 1990; Tansky & Cohen, 2001; Meyer *et al.*, 2002; Martin & Roodt, 2008; Dhar, 2015). The first tri-component model incorporated all three psychological states of employee commitment, affective commitment, continuance commitment, and normative commitment (AC, CC, and NC respectively), and was developed by Allen and Meyer (1990), who argued that employees are likely to experience all three commitment levels simultaneously, although at varying degrees. Complementary multidimensional models followed (Meyer & Allen, 1991; Meyer *et al.,* 1998; Meyer *et al.,* 2002) and received increasing support from other researchers (Cheung & To, 2010; Visagie & Steyn, 2011; González, 2016). While these models argued against reliance on relating CC and proxy variables such as age, gender, and tenure, they highlighted the correlation, albeit small, between the three-forms of commitment, AC, CC and NC, and suggested that these proxy variables play a minor role in elevating employee commitment (Meyer *et al.*, 2002). Various research now seeks to understand employee commitment in terms of regional culture, perceived impact on leadership behaviours and its influence on OB, as initiated by Hofstede (1980). This study focused on the multidimensional perspective of OC, formed by three components (AC, CC, and NC), of which the most widely studied is AC, and refers to the employee's emotional attachment to, identification with, and involvement in the organisation (Mathieu & Zajac, 1990). Accordingly, the CC component refers to commitment based on the costs that the employee associates with leaving the organisation (Allen & Meyer, 1990). Finally, the NC component refers to the "employee's feelings of obligation to remain with the organisation" (Allen & Meyer, 1990). More specifically, this research is more concerned with commitment across cultures as discussed in the following sections.

National cultures and culture differences in organisations
Several frameworks have been developed to help differentiate the effect of geographic cultures on OB. Each framework is based on the premise that the unique aspects of a culture can be described using a finite set of dimensions, and that countries can be assigned scores reflecting their relative standing on these dimensions (Hofstede, 1980b, 1983; House, Hanges, & Ruiz-Quintanilla, 1997, House *et al.*, 2004, Schwartz, 2006). Accordingly, culture can be defined "as shared motives, values, beliefs, identities, and interpretations or meanings of important events that originate from common experiences of people from the same group" (House *et al.*, 1997). The most commonly accepted definition of the influence of culture on OB arose from the geographical cultural studies of Hofstede (1980b). According to Hofstede (1980b) "cultural programming" for a geographic region begins at birth and continues throughout the individual's life within a particular society. Culture was defined in the 1980s by Hofstede (1980b) as "the collective programming of the mind which distinguishes the members of one group of people from another". Because of the above review, the connection that needs to be understood between culture and leadership theories, which this study aims to extend, is that larger power distance countries tend to agree with theory X (Hofstede, 1980b). Thus, prominent in the findings of House *et al.* (2004), is that geography had a major influence on culture, which

explained inter-societal variation in cultural dimensions, such as power distance. The portrayal of Africa and culture, leadership, and organisation by House *et al.*'s (2004) globe study, is that organisations operating in countries/regions with high uncertainty-avoidance orientation do not regard leaders/managers as powerful because they guard against those leaders/managers that abuse power (House *et al.*, 2004). The opposite can be said for low power distance countries. Unlike low power distance countries, people as managers in large power distance countries are said to prefer decision-making to be centralised. This is probably why House *et al.* (2004) incorporated *Ubuntu* in their analysis of culturally endorsed leadership as a distinctive philosophical concept on which the sub-Saharan Africa cluster managers could focus. According to House *et al.* (2004), countries within the sub-Saharan cluster are known for their mentality of African humanness, which is embedded in *Ubuntu* and characterised by the norms of reciprocity, suppression of interest, human interdependence, and the virtue of symbiosis.

The development of *Ubuntu* culture as an influence in OB research

The concept of *Ubuntu* (African humanness) appeared in South African literature sources from as early as the mid-1990s. The idea of "African humanness" as related to *Ubuntu* can be found in Mangaliso (2001) who viewed the *Ubuntu* concept as "humanness – a pervasive spirit of caring and community, harmony and hospitality, respect and responsiveness – that individuals and groups display for one another". As reviewed in this study, all definitions of *Ubuntu* (Broodryk, 2005; Karsten & Illa, 2005; Qobo & Nyathi, 2016) have three common denominators, which all seem to be principally concerned with actions that are welcoming/accommodating, sharing, and sustaining human relations and behaviour. Therefore, *Ubuntu* can be derived from efforts that explicate how these actions interrelate to determine togetherness in a community and/or organisation. The philosophical thought system of *Ubuntu* (translated as African humanness, with slogans like *Umuntu ngumuntu ngabantu*, that means: 'a person is a person through others') is becoming increasingly important in understanding the influence of management approaches on OB (Mangaliso, 2001; Nussbaum, 2003; Msila, 2008; Nyathi, 2009; Nkomo, 2011; Qobo & Nyathi, 2016). The *Ubuntu* concept is generally invoked to capture a constellation of traditional African value claims with a purportedly deep oral tradition. The predictive power sharing influence of *Ubuntu* embedded in statements like, 'a person is a person through others', can also be translated into 'a person is a person through sharing his/her power with other persons'.

The current study explores this predictive power as the main influence on work orientation by African cultural practices and social values and their prediction of African management orientation. This predictive power and other cultural orientation is founded on cultural dimensions theories (Hofstede's, 1980b; House *et al.*, 2004). House *et al.* (2004) acknowledged culturally endorsed leadership noting it as a distinctive philosophical concept that sub-Saharan Africa organisational managers should focus on when developing employee OC. Indeed, considerable research in the OB discipline has begun to review the influence of regions and associated cultures on management (Astakhova, 2016; Fischer & Mansell, 2009; Gellatly *et al.*, 2006; Li, Kim, & Zhao; 2017; Limpanitgul, *et al.,* 2017; Meyer *et al.,* 2012, 2015). *Ubuntu* collective values and their influence on work behaviour, identified in the South African context, appear to be centred on managers who do not have an understanding of the implications for leading teams of various cultures and languages (Nicolaides, 2010). The understanding of the power mechanism that *Ubuntu* may provide for organisational and management approaches in the context of South Africa is clearly articulated in Mangaliso's (2001) research. Mangaliso (2001) highlighted that greater commitment to the goals of the organisation translating into measuring effectiveness and efficiency is indeed possible when *Ubuntu* is embraced. He highlighted that this occurs because applying *Ubuntu* principles in leadership reinforces understanding among all employees, which results in group solidarity, teamwork, and collective pride in achieving organisational goals. Mangaliso (2001) argued that helpfulness towards others in a work team creates a climate of collegiality based on sharing and caring because of an *Ubuntu* intrinsic understanding that all humans are interconnected.
The influence of Ubuntu *on frontline managers' OC*

A modicum of most cited hospitality studies (Browning, 2006; Gunlu, Aksarayli & Perçin, 2010; He, *et al.* 2011; Kuruuzum, Cetin & Irmak, 2009; Labatmediene, Endriulaitiene & Gustainiene, 2007; Lam & Zhang, 2003; Maxwell & Steele, 2003; Silva, 2006) confirmed that the concept of OC is most prevalent in the hospitality sector context. However, until the mid-2000s, OC theory and most hospitality research focused

primarily on a variable-centred approach, and outcomes of relevance to the organisation including human resources practices, hospitality climate, employee job satisfaction, and work-to-family balance (Choi & Kim, 2012; Gunlu, *et al*., 2010; Jung & Yoon, 2016; Nadiri & Tanova, 2010; Zhao, 2016). Very few hospitality studies (Gunlu *et al*., 2010; Manzur & Jogaratnam, 2006; Namasivayam & Zhao, 2007) attempted to focus on the influence of regional culture, such as collectivism, embedded in concepts like *Ubuntu* on employee OC. The interest of these studies can mostly be attributed to the emergent hospitality literature focusing on cultural dissimilarities resulting from power distance and collectivism among diverse work groups (Gunlu *et al*., 2010; Manzur & Jogaratnam, 2006; Namasivayam & Zhao, 2007). Namasivayam and Zhao (2007) argued that culturally driven importance of family roles over work roles might affect employee attitudes towards work. The essential argument, according to these authors, is the possibility that family plays a bigger role in individual's lives in certain cultural groups than it does in other groups. Namasivayam and Zhao (2007) concluded that cultural factors such as religion and local labour market factors can potentially influence commitment to the organisation.

Meyer *et al*. (2012) noted that until their own research studies on the influence of geographic cultures on managerial or leadership styles and OC, studies were few and mainly focused on two primary culture dimensions: individualism and collectivism (identity based on personal qualities or group membership respectively), and power distance (acceptance of unequal power distribution). This study was located in this line of thought propounded by Meyer *et al*. (2012). Research in the mainstream management literature has since encouraged a more people-centred approach to articulating factors that positively influence OC understanding of the culturally-driven importance individuals attach to group membership (Li *et al*., 2017; Meyer, Morin, & Vandenberghe, 2015). Studies by Huhtala and Feldt (2016) suggested that fostering ethical virtues may help organisations attract employees who feel that their personal values are aligned with those of the organisation, and generate positive attitudes and behaviours in employees. Limpanitgul *et al*. (2017), increased the understanding that employees who have a strong sense of belonging feel more obliged to follow organisational norms when they are in a collectivist working culture. These authors concluded that organisational characteristics, such as culture, strengthens employee AC in both individualist and collectivist organisational cultures (Limpanitgul *et al*., 2017). In the context of South Africa, Browning's (2006) research is among the rare studies that initiated discussions about the importance of examining a national and ethnic culture, such as *Ubuntu,* and its relationship with management styles, management behaviour, and OC in a hospitality service organisation. In essence, Browning (2006) found during the interviews with frontline managers and frontline employees that the tendency of South African employees to attach importance to relationship building, personal interaction, mutual respect, and the soft skills of management, were more on the point of emphasising *Ubuntu* as an African culture. Based on the above discussion on the potential influence of *Ubuntu* in OB research, it is hypothesised that:

- **Hypothesis 1**: There is a positive relationship between frontline managers' OC (AC) and *Ubuntu* values-based work orientation (facilitated by immediate managers who show compassion, solidarity, and collectivism).
- **Hypothesis 2:** There is a negative relationship between frontline managers' OC (CC) and *Ubuntu* values-based work orientation (facilitated by immediate managers who show compassion, solidarity, and collectivism).
- **Hypothesis 3:** There is a significant positive relationship between frontline managers' OC (NC) and *Ubuntu* values-based work orientation (facilitated by immediate managers who show compassion, solidarity, collectivism, respect, and dignity).

Consequence of OC on service quality
Previous research has shown that employee's OC to service quality can be a function of managers' affective desire to improve their unit's service quality (Hartline & Ferrell, 1996). A group of studies presented empirical evidence (Babakus *et al*., 2003; Cheung & To, 2010; Elmadag *et al*., 2008; Gunlu *et al*., 2010; Maxwell & Watson 2006) highlighting that frontline managers are the interface between guests and frontline employees. These studies emphasised the responsibility of frontline managers generating affective responses of frontline employee's AC, which in turn directly influences their performance outcomes, such as service quality behaviour. Accordingly, the responsibility of frontline managers further emphasise the fundamental

importance of top management (whom they report to) commitment towards frontline managers, which ultimately filters down to frontline employees (Maxwell & Steele, 2003; To *et al.*, 2015).

Even though there is limited hospitality research that examines the relationship between OC and service quality behaviour encompassing both internal and external customers, a survey conducted by Gjerald and Øgaard (2010) showed that the commitment and cooperation between co-workers facilitates role expectations and role divisions during complex service deliveries. Additional studies confirmed that frontline managers with close interpersonal relationships and interactions with their co-workers demonstrate higher levels of commitment towards service quality (Strydom, 2012). Based on this review, internal service quality is facilitated by team cohesion, and quality of interaction and cooperation between the value-adding departments; therefore, predicts the relationship between frontline managers' commitment and service quality behaviour. Malhotra and Mukherjee (2004) indicated that employees' OC has a significant impact on the service quality delivered. It is also worth noting that, only AC predicted service quality behaviour of customer contact employees. More recently, studies have confirmed that OC also positively influences service quality (Garg & Dhar, 2014). In another study, Dhar (2015) reported a positive relationship between the mediating role of OC on perceived accessibility and support for training, and benefits resulting from such training on service quality. Summing up, the broad theme of this study has found support in the most recent research, which indicates that employee OC strongly influences employee performance and the quality of customer service delivered (Dhar, 2015; Garg & Dhar, 2014; Jaiswal & Dhar, 2016). Based on the above discussion, it is hypothesised in this study that frontline managers who demonstrate high levels of commitment will demonstrate a positive service quality behaviour (which is facilitated by cooperation with co-workers and commitment for delivering service quality internally, and to the customer):

- **Hypothesis 4:** There is a significant positive relationship between frontline manager's AC and service quality behaviour.
- **Hypothesis 5:** There is a negative relationship between frontline manager's CC and service quality behaviour.
- **Hypothesis 6:** There is a significant positive relationship between frontline manager's NC and service quality behaviour.

Figure 1: Conceptual model with hypotheses
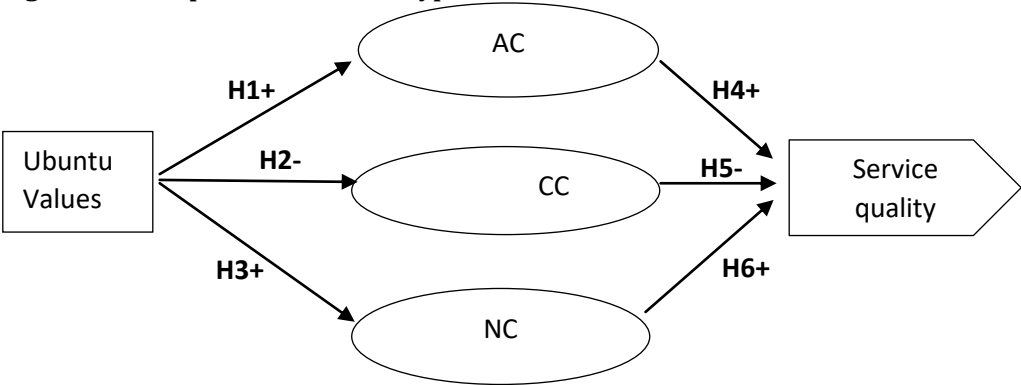
3. Study Method

The research context and sample
To test the proposed conceptual model in Figure 1, an empirical study was conducted in three-, four- and five-star graded tourist hotels in South Africa. The tourist hotel accommodation sub-sector in South Africa consists of multi-national and multi-international hotel brands as well as privately owned hotels. The chosen hotels were identified through several sources, namely, (a) Tourism Grading Council of South Africa (TGCSA), (b) CATHSSETA, (c) Trip-Advisor, and (d) South African Tourism Lilizela awards. The hotel industry has a series of characteristics that are very suitable for this study. First, the industry provided a unique environmental context in terms of diversity related to size, star rating, number and type of employees, scope

and scale of functions, and fiscal positions (Petzer & Steyn, 2006). The hotel chains chosen for the research as being South African owned have a presence in each of the South Africa's nine provinces (see Appendix 1). More than their presence across South Africa, the South African owned hotel groups of companies were considered likely to have frontline managers aware of the *Ubuntu* culture.

Previous hospitality research (Horng & Lin, 2013; Jung & Yoon, 2016) used convenience samples because of the difficulty in obtaining permission from employees identified through random sampling techniques, so convenience sampling allows every frontline manager approached, and who agrees to participate, an opportunity to participate. A convenience sample of 336 frontline-managers in 56 tourist hotels, covering all nine provinces in South Africa was surveyed using a structured questionnaire. Each questionnaire was accompanied by a covering letter, which requested the respondents to return the questionnaires in the reply envelope provided, coded to identify which responses were from which hotel. The covering letter with each questionnaire explained the objectives of the study, assured respondents of confidentiality, and urged them to participate in the study. It was decided to include managers (encompassing, frontline supervisors/coordinators, assistant managers, and managers), as participants because, first, there is a lack of studies using managers (frontline managers acting as interface between frontline employees and customers on a daily basis). Second, the scarcity of studies in the hospitality literature based on information obtained from multiple sources (Karatepe, 2013). The decision to include frontline managers as participants was also made because of their knowledge of the values and norms of the organisation, and the fact that they are responsible for communicating these aspects to frontline employees.

Table 1 indicates the profile of the participants. Two hundred and twelve (212) usable questionnaires were returned, yielding a 63% response rate. Respondents were 62 per cent female and on average 36 years old. The mean respondent age of 36 in this study, was consistent with the average age of 35 years in all sub-sectors within the CATHSSETA scope (CATHSSETA, 2014). The majority of the 212 frontline managers who participated had either a post-matric (hospitality certification) or a national diploma (60.7%) and over 21 per cent had completed a grade 12 or national senior certificate. Just over fifty per cent (50.7) of the total sample were black South African frontline managers, followed by 29.2 per cent white.

Table 1: Demographic characteristics of the respondents (N=212)

Characteristics	Frequencies	%age of respondents
Gender: Female	130	61.6
Male	81	38.4
Total	211	100
Education: Grade 11 or lower	20	9.5
Grade 12 (Matric)	45	21.3
Post-Matric Diploma or certificate	128	60.7
Baccalaureate degree	14	6.6
Post-graduate degree	4	1.9
Total	211	100
Marital status: Single	107	50.7
Married with no children	14	6.6
Married with children	67	31.8
Divorced	9	4.3
Widow/Widower	4	1.9
Living together/Cohabitant	10	4.7
Total	211	100
Job profile: Frontline-supervisor (or coordinator)	78	36.8
Frontline-Assistant manager	46	21.7
Frontline-manager	88	41.5
Total	212	100
Length of previous experience in the hotel industry:		
Less than a year (12 months)	4	1.9
1-2 years	18	8.5

Characteristics	Frequencies	%age of respondents
2-5 years	35	16.6
5 -10 years	56	26.5
10-15 years	40	19
15-20 years	30	14.2
More than 20 years	28	13.3
Total	211	100

Measures
The variables used in this study were operationalised through an iterative process, using previously published scales.

OC: The facets of OC were measured by adapting items from previous empirical research (Labatmediene *et al*., 2007; Shore, Barksdale & Shore, 1995). The scales adapted for this study (Labatmediene *et al*. 2007) were included because of their own parsimony and good psychometric properties, which reported coefficient alphas of 0.80 (for AC), 0.77 (for CC), and 0.62 (for NC). Cronbach Alpha is the most widely used measure of assessing the consistency of the entire scale, was used to calculate the reliability and internal consistency of the measures within each section (Churchill, 1979; Cortina, 1993; Hair *et al*., 2010). The agreed acceptable Cronbach's alpha is .70, although .60 is deemed the lower limit of acceptability (Hair *et al*., 2010; Strauss *et al.*, 2016). In this study, coefficient alphas for AC was 0.77, NC was 0.83, and CC was 0.76; overall, the OC scale in this study was 0.88.

Ubuntu measures: The *Ubuntu* construct was measured using a 26-item questionnaire asking the participant to respond on a five-point response scale (1 = total disagreement and 5 = total agreement). Of the 26 measures, 16 were the modified items adapted from Sigger *et al.* (2010), Brubaker (2013) and Strauss *et al.* (2016), and 10 were compiled especially for this study. *Ubuntu* values were measured in this study using items, for example, "my manager is usually present (emotionally) to share my pain during difficult times", "I feel that my manager treats me with utmost respect and dignity", "I do helpful things that will benefit me and the colleagues I know", and "the well-being of my co-workers is important to me". In a study of *Ubuntu* management style in Tanzania (Sigger *et al.*, 2010), and servant leadership in Rwanda (Brubaker, 2013), reliability coefficients of 0.82 and 0.87 respectively were reported. In this study, the alpha coefficient of the whole *Ubuntu* scale was 0.93.

Service quality behaviour measures: Finally, the service quality behaviour construct was measured by two sub-constructs namely, internal service quality and service quality performance. However, only those items that pertained specifically to employee-related aspects of service quality were selected from the literature (Babakus *et al*., 2003; Hallowell, *et al.* 2002; Peccei & Rosenthal, 1997; Sharma, Kong & Kingshott, 2016). Following the leads in the service marketing literature (Malhotra & Mukherjee, 2004), the service quality behaviour scale encompassing nine item measures (five measuring internal service to value-adding departments, and co-workers, and four measuring behaviour that instils confidence to the external customers) was modified and only 'perception' items were used. For example, "most of my coworkers are genuinely committed to first class service", or "most of my coworkers are genuinely committed to giving good service to customers" (Hallowell *et al.,* 2002; Peccei & Rosenthal, 1997; Sharma *et al.*, 2016). Service quality performance was measured by adapting scales developed by Babakus *et al.* (2003). As in the case of Babakus *et al.* (2003) who reported alpha coefficients of 0.94, the alpha coefficient of the nine-item measures used in this study was high: 0.86 (see Appendix 2).

4. Data analysis and results

Measurement analysis
The data were analysed in several ways. A statistical Package for Social Sciences (SPSS, Version 25) was used for statistical analysis (IBM Corporation, 2018). Descriptive statistics including mean, standard deviation, and variance were computed for each of the 47 measures of OC, *Ubuntu,* and service quality behaviour scale items used in the study. Appendix 2 presents the descriptive analysis using these simple statistical indicators,

including Cronbach's alpha. These statistics provided further insights into the respondents' perceptions of OC, and the cultural influence of *Ubuntu* dimensionality. Even though the multi-item measures used in this study reported acceptable psychometric properties (Eisenberger *et al.*, 1986; Babakus *et al.*, 2003; Browning, 2006), they were assessed in this study. Statistical analysis procedures were used to evaluate dimensionality, reliability, and convergent and discriminant validity of the measures. In this study, EQS structural equation modelling (SEM), version 6 software (Bentler, 1992; Marsh, *et al.* 2014) was used to assess both dimensionality and psychometric properties of the measurement scales. EQS (an abbreviation for equations) can be seen as "one of the maximum likelihood (ML) estimators, and asymptotically robust test statistics, which set it apart from other SEM programmes" (Satorra & Bentler, 1999).

Initially, the study made use of exploratory factor analysis (which explains the variables in terms of their common underlying dimension or factor) (Hair *et al.*, 2010) and tested the unidimensionality of the scales by performing principal axis factoring. Two factors were extracted and subjected to construct validity with which the Oblimin with Kaiser Normalisation method was applied over six successive trials. The results indicated that unidimensionality was achieved for each construct, such that factor loadings greater than 0.50 were considered significant in this study. The two OC factors extracted had Eigenvalues greater than 1 and factor loadings greater than 0.50. These factors were well defined by the eight original variables that were most heavily loaded. The first factor, AC, comprised four items which had acceptable loadings on this dimension (Table 2).

Table 2: Factor loadings of the commitment items for the two-factor Oblimin model (N=212)

OC scale items	Rotated Factor Loadings
Factor 1: AC	
This hotel has personal meaning for me.	0.70
I am part of family at this hotel.	0.68
I feel as if the problems of this hotel are my own.	0.53
Knowing that my own work had made a contribution to this hotel pleases me.	0.46
Factor 2: NC	
Even if I got a better job offer elsewhere, I would not feel it right to leave my hotel.	0.75
I believe in the value of remaining loyal to one hotel.	0.67
I believe that a person must always be loyal to his or her hotel.	0.66
Things were better in the days when people stayed with one hotel for most of their career.	0.60

The loadings of the four attributes of the commitment factor 1 ranged between 0.46 and 0.70, representing one abstract and homogenous underlying dimension that accounted for 40.98 per cent of the variance. The second factor abstracted was NC (8.64 per cent) comprising the four original attributes (see Table 2). The cumulative percentage of the total variance extracted by the two OC factors was 49.64. The results of the factor analysis are articulated in Table 3.

Table 3: The results of factor analysis on eight attributes/items (N=212)

OC factors/attributes	Factor loadings	Eigenvalue	% of var.	Rel. coefficient.
Factor 1: AC				
Personal meaning	0.70	5.39	40.98	0.778
Part of family	0.68			
Sense of ownership	0.53			
Meaningful contribution	0.46			
Factor 2: NC				
Job alternatives	0.75	1.52	8.64	0.833
Value of loyalty	0.67			
Sense of loyalty	0.66			
Staying intensions	0.60			

As can be seen in Table 3, the factor loadings of the commitment items for the two-factor model were quite similar to those reported in other studies (Shore *et al.*, 1995; Labatmediene *et al.*, 2007). As mentioned, SEM was also conducted to provide a more thorough validation. The EQS 6.2 version was conducted to determine whether the predicted two-factor structure of OC (AC and NC) is valid for the South African tourism hotel accommodation sample. The results indicated significant loadings (>0.50) of all scale items on their respective latent constructs.

Reliability is defined by Hair *et al.* (2010) as an assessment of "the degree to which the observed variable measures the true value and is error free", thus, the opposite of measurement error. The most commonly used measure of reliability, which applies to the consistency among the variables in a summated scale, is internal consistency. This suggests that, when measuring internal consistency, the individual items or indicators of the scale, should all be measuring the same construct and thus be highly inter-correlated (Churchill, 1979). The internal consistency scales used in this study was Cronbach's alpha, which is based on the average correlation of items within a test, if the items are standardised. Based on the recommendations of Churchill (1979), corrected item-total correlations were first computed. The results showed that all the items had a corrected item-total correlations greater than 0.30, the generally accepted cut-off (Hair *et al.*, 2010).

Subsequently, Cronbach's alphas, the most widely used measure of assessing the consistency of the entire scale, was computed. The agreed acceptable Cronbach's alpha is 0.70, although 0.60 is deemed the lower limit of acceptability in exploratory research (Hair *et al.*, 2010; Strauss *et al.*, 2016). As in previous studies (Eisenberger *et al.*, 1986; Babakus *et al.*, 2003; Browning, 2006; Brubaker, 2013), the alphas varied between 0.88 (for the OC construct) to 0.91 (for the *Ubuntu* construct) and 0.84 (for the service quality performance construct). Therefore, it can be confidently said that a Cronbach Alpha coefficient of more than 0.70, which reveals the consistence of items in OC and *Ubuntu* constructs' sections using exploratory factor analysis (EFA) and structural equation modelling (SEM) was acceptable. Furthermore, Hair *et al.*'s (2010) procedures were followed to estimate the relative amount of convergent validity of the multiple item construct. Items that are not different from each other were grouped together, for example, the AC is demonstrated by three similar and related elements; (1) "this hotel has personal meaning for me", (2) "I am part of family at this hotel", and (3) "I feel as if the problems of this hotel are my own". The literature recommends 0.30 or 0.40 as the criteria for item retention (Hair *et al.*, 2010). Items were retained if they did not cross-load on to other factors, particularly where the factor was deemed important to the content of the construct domain and, only factors with an eigenvalue greater than one were retained so that a good or very good rotated structure is reflected. Convergent validity on the other hand is established if the average variance explained for each item accounts for 0.50 or more of the total variance (Hair *et al.*, 2010). The average variance extracted for factors were: 49.64 (which were close to the 0.50 level) for OC, 0.54 for *Ubuntu* and 0.55 for service quality behaviour. Overall, convergent validity was confirmed for each dimension.

Hypothesis testing and discussion

The conceptual model presented in Figure 1 was tested with the EQS structuring equation modeling software programme (Bentler, 1992). In order to find out what values of *Ubuntu* can be related to OC, the Spearmen's correlations among the different values and the three components of OC was used. The results showed that contrary to this expectation there were no significant correlations between *Ubuntu* values and CC. However, positive and significant correlations were found between *Ubuntu* compassion and collectivism/group solidarity and AC and NC. A correlation matrix is provided in Table 4, and the results presented in Figure 2. Several statistics were employed to evaluate the goodness-of-fit of the mode.

Table 4: Spearman's correlations between OC and *Ubuntu* values

Constructs	AC	NC
Ubuntu compassion	0.34	0.52
Ubuntu collectivism and group solidarity	0.40	0.50
Service quality performance	0.54	0.32

First, the non-normed fit indexes (NNFI) and comparative fit index (CFI) were 0.90 and 0.93 respectively, which constituted a good indication that the hypothesised measurement model presented acceptable fit to its

respective data. The average RMSEA was 0.06, which also reflected an adequate fit. The χ^2 /degrees of freedom ratio was between 1.63 and 2.01, which was also satisfactory. Therefore, relying on sound statistical and theoretical rationales makes it possible to confidently state that the structural analysis stood as an adequate representation of the sample data (see Table 5).

**Table 5: Measurement and structural equation models of frontline managers' OC**

Tested Models	Cases	Estimates	χ^2	Df	χ^2 /df	P = 0.1.	NFI	NNFI	CFI	RMSEA
M1	212	41.74	424.744	261	1.635	0.000	0.825	0.911	0.923	0.055
M2	212	30.63	198.961	99	2.010	0.000	0.862	0.908	0.924	0.069
M3	212	30.63	185.046	98	1.888	0.000	0.871	0.919	0.934	0.065

Ubuntu as factor influencing frontline managers' OC

H1 postulate that there would be a positive and significant relationship between frontline managers' AC and *Ubuntu* values-based work orientation which will be facilitated by immediate manager who shows compassion, group solidarity/collectivism). As illustrated in **Figure 2**, this hypothesis is supported (t=4.804; $p < 0.001$).

Note: Fit Indices: Chi square (χ^2) /df =1.88; Normed fit index NFI=0.87; Comparative fit index (CFI) = 0.93; RMSEA=0.06

Figure 2: The revised model of the antecedents and consequences of OC
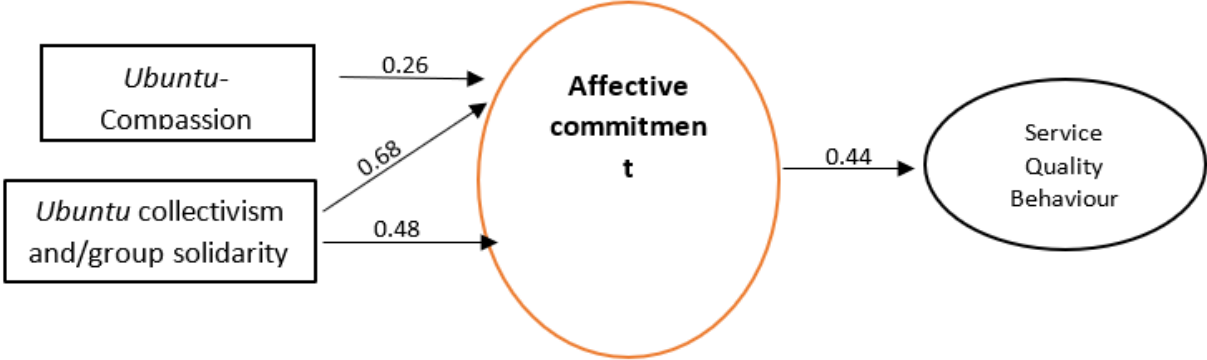
The AC component was found to be significantly correlated with both *Ubuntu* compassion and *Ubuntu* collectivism/group solidarity. H1a posits that there will be a negative relationship between frontline managers' calculative commitment and *Ubuntu* values-based work orientation, which will be facilitated by immediate manager who shows compassion, solidarity/and collectivism. This hypothesis was supported as there is no statistical significant difference in the path coefficients. Conversely, H1b is partially accepted since *Ubuntu* group solidarity/collectivism is the only variable that is positive and significantly correlated with NC (t=2.676; $p < 0.01$). Some previous hospitality studies (Manzur & Jogaratnam, 2006; Namasivayam & Zhao, 2007; Gunlu *et al*., 2010) highlighted that managers from collectivist cultures and who support a positive work ethic are more committed to the organization than individualistic managers. These results are not surprising given that Browning (2006) noted that managers who lead or behave in a way that contradicts the expectations of frontline employees do not realize the opportunity of the positive influence they can have in encouraging employee interaction with customers.

Additional studies by Poovan *et al.* (2006) found that *Ubuntu's* collective values promoted a shared value system that encourages team members to strive towards organizational values, which brings the team closer. In turn, this helps to increase the level of team members' commitment, thereby, leading to a positive impact on the organization. According to Namasivayam and Zhao (2007), cultural factors, such as religion and local labor market factors, influence employee OC. These studies seem to be in line with Hofstede's (1983) sentiment about cultural relativity of the organization theory. Within this theory, constructs such as individualism and collectivism are defined in terms of the attributes possessed by the people within a given culture of a country (Hofstede, 2011). Perhaps this is why MacDonald *et al*. (2014) argues that supervisors

must put forth more effort than their subordinates in order to build group solidarity. Fundamentally, the relationship between team solidarity and commitment is taken as a function of strong relationships with others, teamwork, and strong loyalty to group goals. A more recent study by Woermann and Engelbrecht (2019) affirmed the view that *Ubuntu* promotes collective decision making through encouraging interpersonal relationships among work teams.

The consequence of frontline managers' OC

Hartline and Ferrell (1996) argued that employee's OC to service quality is a function of managers' affective desire to improve his or her unit's service quality. To explain the above statement, empirical research by Babakus *et al*. (2003) and Cheung and To (2010) has shown that inside the organization, frontline managers have the role to interface the interaction between frontline employees of value adding departments and customers. Based on the theoretical underpinning of service quality performance, it was hypothesized in this study that frontline managers demonstrating high levels of commitment will demonstrate a positive service quality behaviour (which is facilitated by cooperation with co-workers and commitment for delivering service quality internally, and to the customer). The results showed that there was a significant correlation between frontline-managers demonstrating high levels of AC and service quality behaviour, which was demonstrated by cooperation with co-workers and commitment to deliver service quality internal and to the customer, thereby supporting hypotheses 3 and 4 (t=8.263; p<0.001). Previous research (Gjerald & Øgaard, 2010) affirmed that the commitment and cooperation of co-workers and value adding departments facilitate role expectations during complex service delivery performance. This study revealed that the frontline managers with high levels of both AC and NC practices in a tourist hotel accommodation led to positive service quality behaviour. Additional studies confirmed that frontline managers with close interpersonal relationships, and who interact with their co-workers and other departments, demonstrate higher levels of AC towards service quality performance (Strydom, 2012).

5. Conclusion, limitations, and further research options

The results of this study highlighted the importance of *Ubuntu* values and OC in relation to service quality by integrating *Ubuntu* discourse with OB and service marketing research, and therefore bringing new insights to the supervisor / employee supportive atmosphere (through physical and emotional presence) and OC in the context of South Africa's tourist hotel accommodation industry. The results showed that *Ubuntu,* as an African culture and practice, is relevant in modern society and could enhance employees' experiences of team compassion, cohesion, and support for each other and the organization, which can develop into an AC and NC motivational process.

Of the three components, only AC and NC had a significant relationship with service quality. In addition, there was a significant positive relationship between *Ubuntu* values, facilitated by group solidarity and collectivism (working together as a team), and managers' compassion (being there both physically and emotionally for their team) and OC (Mangaliso, 2001). While these two elements of *Ubuntu* significantly correlated with both dimensions of OC (AC and NC), other elements such as respect and dignity were also related with OC; in particular, respondents appreciated recognition, knowing that they had made a contribution towards company goals. The association between frontline manager OC, and its antecedents, is more complex than originally proposed and could be studied in many ways; therefore, the emergent model provides good news for South African hospitality managers. The research indicated strong evidence that improvements to service quality behaviour would increase through collective teamwork, managers' physical presence, and authenticity of the emotional support given to employees (Hartline *et al*., 2003; Strydom, 2012; Tang & Tsaur, 2016).

Based on this study's results, and affirmed by the literature (Battle, 2009; Khoza, 1994; Qobo & Nyathi, 2016; Tutu, 2004), managers as representatives of hospitality organizations should pay attention to valuing the worth of others (co-workers and teams), showing kindness (genuine authenticity), and ensuring a common understanding between the supervisor and team members. Together, the above should endorse *Ubuntu* values and the notion of 'people first' in a hospitality organization (Jackson, 2004; MacDonald *et al*., 2014; Woermann & Engelbrecht, 2019). The essential message is that *Ubuntu* values and practices should be

understood as an organizational resource that managers could use to trigger a positive and motivational atmosphere among employees. These management practices can help to encourage the common good by using ethical attraction, recruitment, and retention of employees that are a good fit in the organization, thus, developing motivational processes for employees (McGregor, 1960; Huang & Hsiao, 2007; Roodt, 1997; Wiener, 1982). Therefore, fostering *Ubuntu's* compassion and collectiveness as a "gift that Southern Africa can give to the world" (Tutu, 1995) could enable organizations to attract employees who feel authenticity from managers that align with their individual values, which then generate positive attitudes and work behaviours in employees.

A major contribution of this study was to provide a new understanding about the mechanisms that explain why genuine authenticity, respect, and care for others would lead to not only good working teams, but also positive employee work outcomes. Besides the usual predictors of employee OC, this study's findings demonstrated that employees who had a positive perception of their organizations, and co-workers' support demonstrated by the managers' understanding of *Ubuntu* values, were more likely to be engaged with their jobs and thus commit and develop a culture of team support, a collective achievement towards organizational missions and goals, and a service quality culture. This study highlighted that to enhance OC in South Africa's hospitality sector, a strong team cohesion culture, facilitated by genuine supervisor support, and *Ubuntu* compassion and collectivism has to be supported to encourage service quality behaviour among team members and between superiors and subordinates.

Although this study provided valuable insights and contributions, there were some limitations, which should be considered when generalizing the study results. The sample comprised only frontline managers as customer contact employees, as it was not possible to include data from customers; therefore, service quality behaviour measurement was based on frontline manager perceptions rather than the actual service quality performance results triangulated between frontline managers, customers, and literature. Finally, the consequences of South African hospitality frontline managers' AC and NC were limited to service quality behaviour, while other consequences, such as service innovation performance, customer satisfaction, and possibly, intention to stay with or leave the organization were not explored.

Based on the above conclusions and study limitations, a number of areas were identified for further research, such as investigating whether this study's findings would hold true in other sectors of the tourism industry. Further empirical efforts might be required to examine the impact of employee OC using longitudinal research designs. Another important avenue for future research is investigating the proposed model in other *Ubuntu* practicing countries, which could include studying hospitality sub-sectors and other sectors. The same model could be used in comparative studies between service sectors; or, within financial services or the nursing field, thus ascertaining whether the model could be used in different industries.

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Appendix 1: List of hotel groups and respondents that agreed to participate in the study

| Province | Hotel Group | 3 star | | | 4 star | | | 5 star | | | Total hotels |
		No. of hotels	No. of response	No. of	No. of hotels	No. of response	No. of	No. of hotels	No. of response	No. of	
Eastern Cape	HG1	1	6		1	4		0	0		2
	HG2	0	0		1	7		0	0		1
	HG3	0	0		0	0		0	0		0
Free State	HG1	1	4		0	0		0	0		1
	HG2	1	4		2	15		0	0		3
	HG3	1	4		0	0		1	6		2
Gauteng	HG1	5	18		0	0		0	0		5
	HG2	0	0		2	7		2	6		4
	HG3	0	0		0	0		0	0		0

| Province | Hotel Group | 3 star | | 4 star | | 5 star | | Total hotels |
		No. of hotels	No. of response	No. of hotels	No. of response	No. of hotels	No. of response	
KwaZulu Natal	HG1	2	8	0	0	0	0	2
	HG2	0	0	2	9	0	0	2
	HG3	0	0	0	0	0	0	0
Limpopo	HG1	0	0	0	0	0	0	0
	HG2	1	4	1	5	0	0	2
	HG3	0	0	0	0	0	0	0
Mpumalanga	HG1	0	0	0	0	0	0	0
	HG2	2	8	2	12	1	4	5
	HG3	1	4	1	6	0	0	2
Northern Cape	HG1	0	0	0	0	0	0	0
	HG2	1	4	2	6	0	0	3
	HG3	0	0	0	0	0	0	0
North West	HG1	0	0	0	0	0	0	0
	HG2	1	4	2	6	0	0	3
	HG3	0	0	0	0	0	0	0
Western Cape	HG1	4	16	0	0	0	0	4
	HG2	0	0	3	19	3	12	6
	HG3	0	0	1	4	0	0	1
TOTALS		21	84	20	100	7	28	48

Appendix 2: Descriptive statistics

Measurement scale 1: OC variables	Mean	Std. Dev	N	Cronbach's Alpha if Item Deleted
S1.1 This hotel has personal meaning for me.	3.79	1.056	212	.874
S1.2 I am part of family at this hotel.	3.94	1.017	212	.875
S1.3 Knowing that my own work had made a contribution to this hotel pleases me.	4.21	0.901	212	.885
S1.4 I feel as if the problems of this hotel are my own.	3.74	1.137	212	.881
S1.5 Leaving would require personal sacrifice for me. (Another hotel may not match the overall benefits I have here).	3.60	1.225	212	.873
S1.6 I worry about what might happen if something was to happen to this hotel.	3.79	1.087	212	.879
S1.7 It would be very hard for me to leave this hotel, even if I wanted to.	3.41	1.241	212	.867
S1.8 I feel I have no job options to consider if I was to leave.	2.76	1.317	212	.883
S1.9 I believe in the value of remaining loyal to one hotel	3.71	1.118	212	.874
S1.10 Even If I got a better job offer elsewhere, I would not feel it was right to leave my hotel.	2.85	1.314	212	.869
S1.11 I believe that a person must always be loyal to his or her hotel.	3.86	1.046	212	.875
S1.12 Things were better in the days when people stayed with one hotel for most of their careers	2.96	1.300	212	.878

Reliability Statistics, Cronbach's Alpha = .886, N of Items = 12
Valid cases = 212 (100%), Excluded cases = 0(0.0%), Total = 212
Scale: 1(strongly disagree); 2(disagree); 3(Neutral); 4(agree); 5(Strongly agree)

Measurement scale 2: *Ubuntu* variables	Mean	Std. Dev	N	Cronbach's Alpha if Item Deleted
S2.1 My manager is usually present (emotionally) to share my pain during difficult times.	3.67	1.176	211	.925
S2.2 My manager is usually available (physically) to suffer with me during difficult times.	3.39	1.200	211	.925
S2.3 My manager encourages me to remain polite even when I disagree with what the guest says.	4.19	0.794	211	.927
S2.4 My manager responds selflessly to free me from suffering when I am under pressure (e.g. manager involvement during busy group guest check-in).	3.89	1.058	211	.925
S2.5 I feel happy when I see my manager notices that I have personal problems that may potentially affect my work performance.	3.78	0.962	211	.925
S2.6 I feel a genuine authenticity/realness /honesty about my manager and this is demonstrated in his/her empathetic interactions with me and guests alike.	3.86	1.009	211	.924
S2.7 I believe each employee should be willing to share (the little) they have with others as a way of brotherly care.	3.92	0.999	211	.926
S2.8 It is common practice for employees to sacrifice their time for the good of other team members.	3.86	0.969	211	.926
S2.9 I feel that sharing my difficulties (grief) with other colleagues makes me strong.	3.49	1.152	211	.928
S2.10 My manager share his/her burden during hard times (e.g., budget cuts, salary pay cuts, restructuring or change of top management) as part of a team.	3.34	1.209	211	.929
S2.11 I feel that my manager treats me with utmost respect and dignity.	4.11	1.015	211	.925
S2.12 My manager greets me whenever he/she sees me.	4.32	0.873	211	.926
S2.13 My manager expects me to respect his/her decisions.	4.37	0.753	211	.926
S2.14 My manager treats each staff member as if he/she was a member of a family.	3.87	1.155	211	.923
S2.15 I have a genuine backing (support) of my co-workers, such that they are willing to help me when I need it.	3.89	0.944	211	.925
S2.16 I actively contribute to work goals that benefit a wider group particularly, where they are worse-off than me.	4.03	0.789	211	.925
S2.17 I generally do trust my co-workers in matters of landing or extending a helping hand.	3.88	0.875	211	.925
S2.18 I have to be alert or else someone is likely to take advantage of me.	3.51	1.114	211	.932
S2.19 I do helpful things that will benefit me and the colleagues I know.	4.10	0.899	211	.928
S2.20 When something unfortunate happens to me (e.g. loss of family member), my co-workers get together to help me out.	3.91	1.001	211	.925
S2.21 I see myself as part of a diverse work team rather than as individual from a different cultural background or nationality.	4.16	0.880	211	.925
S2.22 I feel that all employees should stick together as a family no matter what sacrifices are required.	4.10	0.892	211	.926
S2.23 I feel it is my duty to take care of my co-workers, even if I have to sacrifice what I want.	3.93	0.926	211	.925
S2.24 Being a valuable team player is very important to me than my personal identity.	4.10	0.853	211	.927
S2.25 The wellbeing of my co-workers is important to me.	4.25	0.703	211	.926

Measurement scale 2: *Ubuntu* variables	Mean	Std. Dev	N	Cronbach's Alpha if Item Deleted
S2.26 It is important to me that I respect the decisions (e.g. how to serve the customer) made by my co-workers.	4.16	0.776	211	.926

Reliability Statistics, Cronbach's Alpha = .931, N of Items = 26
Valid cases = 211 (99.5%), Excluded cases = 1(0.5%), Total = 212
Scale: 1(strongly disagree); 2(disagree); 3(Neutral); 4(agree); 5(Strongly agree)

Measurement scale 3: Service quality behaviour	Mean	Std. Dev	N	Cronbach's Alpha if Item Deleted
S3.1 My departmental co-workers go out of the way to help other departments excel in providing a service.	3.79	0.993	208	.844
S3.2 My department is committed providing service to other departments.	4.03	0.748	208	.822
S3.3 Other departments e.g. housekeeping, maintenance, room service) are genuinely committed to first-class service.	3.95	0.864	208	.840
S3.4 Other departments (e.g. housekeeping, maintenance, room service) I liaise with follow through on their commitments towards my department.	3.93	0.831	208	.835
S3.5 Considering all the things I do, I handle dissatisfied customers well.	4.30	0.714	208	.821
S3.6 I do not mind dealing with complaining customers	4.18	0.825	208	.815
S3.7 No customer I have dealt with leaves with problems unresolved.	4.03	0.932	208	.818
S3.8 Satisfying complaining customers is a great thing to me.	4.29	0.864	208	.820
S3.9 Complaining customers I have dealt with in the past are among today's most loyal customers.	4.20	0.844	208	.810

Reliability Statistics, Cronbach's Alpha = .846, N of Items = 9
Valid cases = 208 (98.1%), Excluded cases = 4(1.9%), Total = 212
Scale: 1(strongly disagree); 2(disagree); 3(Neutral); 4(agree); 5(Strongly agree)

Paper 25

Teasing the voice of top management team diversity from an interesting outlier perspective

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Abstract: The visual display indicates that Namibian top management (TM) members need a critical element to initiate innovativeness. The research will address the elements in a visual presentation of inferences, conclusions and represent a way of organizing, summarizing, simplifying, and transforming outlier interviews on TMT. The methods provide used here provide an alternative way of looking at TMT, from the perspective of interesting outliers. The suggestion is that a dynamic interplay exist between TM members and the changing innovation environment. This research findings are met through applying multilevel theoretical reasoning and analytical methodology to some new insights into the controversial relationship, and explore avenues of TMT power, capacity to innovate and the possible influence of demographic index analysis.

Keywords*: Top Management diversity, Outlier, innovativeness*

1. Introduction

The changing face of top management diversity (TMT), cannot be easily explained. The empirical and individual studies on top management diversity (TMT) are dualistic, and TMT was publicized to have both positive and negative effects on organizational outcomes (Umans, 2012). This also left a split in the opinion between theoretical and empirical papers in the TMT research. In this Namibian centred research we will embrace the definition of Hambrick and Mason (1984) (which) define this power group, that influence innovation and performance as "…those who occupy formally defined positions of authority, and those at the head of, or are in strategic positions as the powerful actors in an organization". The researcher will apply and adapt to the TMT and innovativeness methodological setting and develop on those theories and address the gaps in the literature and through interviewing an interesting outlier selection process to create a theory based on empirical research for Namibia. The research problem therefore focuses on gaining a deeper understanding of the innovativeness process.

The main aim is to firstly statistically select outliers for the qualitative components, which will further explore the constructs or attributes of TMT organizational innovativeness outcomes in Namibia, particularly innovation processes and new ways of working, as part of the voice of TMT. The present study will develop and tests an outlier model that connects TMT and innovative orientation to better explain innovation outcomes and firm performance. The contribution of the qualitative component is mainly threefold. First, this study will provides a new angle on the prevailing top management perspective in the innovation literature through selected outliers. Secondly, the strategy literature is enriched by linking upper echelon theory with a novel mediator from a qualitative perspective and create innovativeness constructs and link it with established research. Thirdly, the innovation literature is enriched by identifying factors that help explain diversity and heterogeneity in a firm innovation orientation.

A pervasive view of outliers among substantive researchers is that outliers are problems that must be fixed, usually by removing particular cases from the analyses (Aguinis, *et al.* 2013; Dovoedo & Chakraborti, 2013; Kriegel, Kröger, & Zimek, 2010). Cortina (2002) emphasized that "Caution also must be used because, in most cases, deletion (of outliers) helps us to support our hypotheses (p. 359). Againt this background Aguinis, Gottfredson, and Joo (2013) found that "there are some particular research domains in which studying outliers, rather than treating them as a nuisance that must be eliminated prior to conducting ''cleaner'' data analyses, may lead to important theoretical advancements". An example of such a review is Orr, Sackett and Dubois, (1991) results of a survey regarding how published researchers prefer to deal with outliers. The 183

test validity studies that was examined, to document the effects of different approaches to the detection and exclusion of outliers on effect size measures found there is a disagreement among researchers as to the appropriateness of deleting data points from a study. The researchers report greater use of visual examination of data than of numeric diagnostic techniques for detecting outliers it was also found that outlying data points were not found to be a substantial source of validity variance in a large test validity data set (Orr, *et al.* 1991).

Aguinis, *et al.* (2013), Kriegel, *et al.* (2010), McNamara, *et al.* (2005) and Songwon (2002), directly and indirectly make use, of outlier models and recommend defining the outlier, setting, describing the outlier boundaries and labeling the outlier modeling in detail. A limitation of all of the comparative researchers approaches and findings is that they all accept a linear approach to identifying outliers (Amphanthong, 2012), or emphasize the numbers of outlier identified (Manoj *et al.,* 2013). For the researcher to maintain the degree of investigator control possible (Yin, 1981), and retain the holistic characteristics of TMT innovativeness and applying best practices (Aguinis, *et al.,* 2013), while investigating the outliers, Model 1, represents a rotation approach which incorporate reconsidering the research worth of the identified outlier. This model is adapted from Aguinis, *et al.* (2013), decision tree, that had multiple steps that included error outlier, intersting outlier and influential outliers with the focus on regression, structural equation modeling, and multilevel modeling.

The model description provide an operationalized view, when an observation is identified by means of graphical or visual inspection as a potential outlier, and through root cause analysis and retested and can be justified as a potential outlier which should be recorded for future evaluation (Walfish, 2006). No data point should be removed unless it identifies another outlier on the basis of statistical analysis. Once the outliers are identified for the study the researcher should determine if they worth the study or want to participate in further study (Osborne & Overbay , 2004). If the participant answers "no", the process should drop the outlier and find new outliers but keep the original data. This process can be repeated till no findings of an outlier or resampling becomes an option. The idea is to detect the true face of diversity and select interesting outliers. Given the importance of inter-subjectivity and the separation of theoretical and empirical should not be done in isolation. The choice of interesting outlier's model approach will minimize the isolation of data.

Model 1: Outlier identification model (Source: Author adaption from Aguinis et al. 2013)
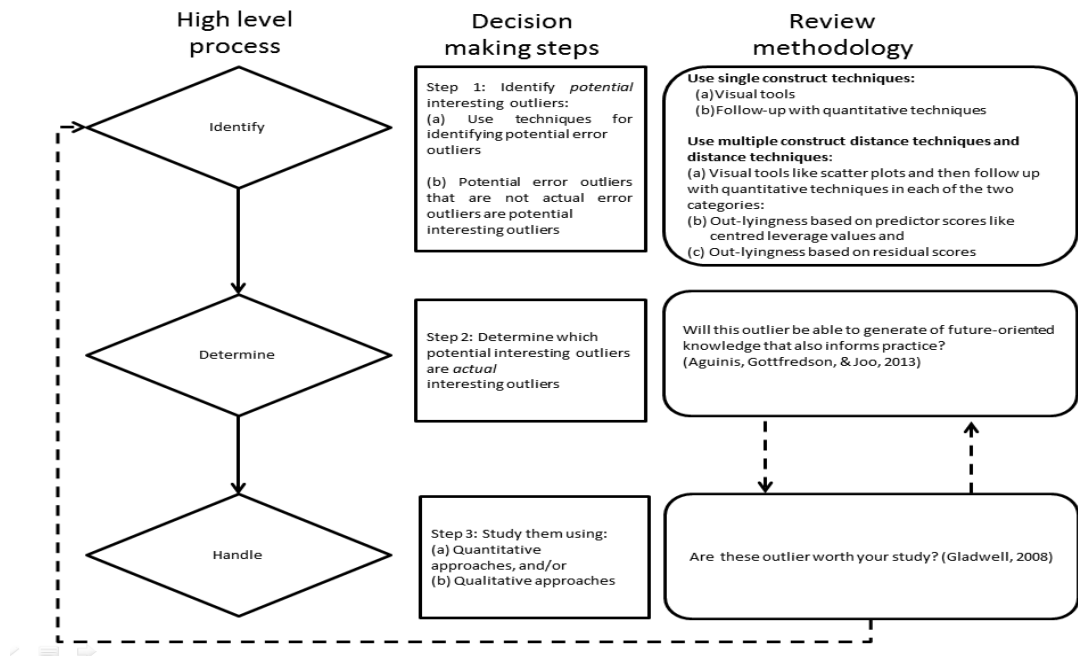
2. Research Methods

The initial sample of organizations and businesses consisted of 500 random Namibian companies from various industries and registered organizations and business in Namibia, with the exclusion of the public sector. This resulted with 133 top managers participating.

3. Results

Summary of descriptive results in Table 1 below.

Table 1: Summary of TM demographic variables

Descriptive Statistics

	N	Minimum	Maximum	Mean	Standard Deviation	Variance
Age	133	25	64	43.42	8.551	73.126
Career tenure	133	3	42	19.316	8.967	80.415
Tenure	133	.4	24	5.958	4.607	21.221
Gender	133	Not applicable		1.306	.461	.212
Nationality	133	Not applicable		1.145	.352	.124
Education level	133	Not applicable		3.128	.874	.764
Education discipline	133	Not applicable		5	2.377	5.652
Functionality	133	Not applicable		4.587	2.456	6.032

% Break down for nominal and ordinal values included in description

Table 1, indicates that the surveyed manager's ages varies extensively between a minimum of 25 and a maximum of 64 years, (var_x = 73.126). The average age of the top managers was 43.42 years (*SD* = 8.551). The age range in this sample here seemed quite varied and does imply that top managers can be seen just as representatives of the general work force. The individual age spread of coefficient of variation, varies from a minimum of .180 to a maximum of .343 (*M* = .198, *SD* = .207). Considering career tenure, the average years spent working as an individual top manager was 19.31 years (*SD* = 8.96). In terms of the individual coefficient of variation, the spread is from a minimum of .113 to a maximum .846, which are also evident in the variance (var_x = 80.415). Because the career tenure here is quite varied and scattered it does not imply that top managers can be seen just as representative of the general work force, on an individual level. The career tenure distribution indicates also small negative correlation, *r (133)* = - 0.037, *p* = .334, with career tenure individual coefficient of variation. individual tenure varies between four months and 24 years. The average years spent working as an individual top manager was 5.958 years (*SD* = 4.607). The tenure spent is skewed to the left, as more than 50% of individual top manager's tenure are between, immediate tenure to 5 years in the current position of occupancy.

Male's dominant the role in top management positions and was (69.4%) of the sample while females were (30.5%), less than half of the males' total sample size. Namibians dominant the role in top management position, and formed part, (85.5%) of the sample foreign nationals formed part of (14.5%) of the nationality variable of the sample. Overall individual top managers all have some form of formal education, which make up 94.7% of the sample. In terms of the education level a bachelor's degree or equivalent are at the peak with 45.1%, then individual managers with a master's degree at 33.1%. No formal education and a doctorate follow each other closely with 5.3% having no formal education, and 2.3% having a doctorate independently. The surveyed sample indicted that 35, (26.3 %) individual top managers specialized in business or economics during their studies and consider it their dominant discipline, 33, (24.8 %), specialized in an engineering science, and 24 (18%) specialized in accounting or auditing as dominant field of education specialization. Top managers indicated in the "other" string, 7 responses (5.3 %,), with the indication and selection of health and

safety as dominant education specialization, which was level with arts and humanities. Law as education specialization, agriculture and no formal education level was recorded independently at 3.8%, and 3%. Medicine recorded only one (0.8%) participating top manager.

Initially the primary outliers were established for the continuous demographic variables indicated by the summary below in Table 2. The researcher made use of the boxplot method, in conjunction with the standard deviation and individual variance to examine the distributions for the demographic variables (Dawson, 2011). This provided the researcher with the knowledge for the visual inspection by the use of scatterplot matrix feedback on the dominant patterns in the data and increase the decision-making in the selection of potential outliers (Songwon, 2002).

Table 2: Summary of outlier identified by box plot method

Variable	Outlier identified	Outlier identification	Outlier positions
Individual age	12 outliers	1871, 1869, 1868, 1870,1859, 1846, 1851, 1858,1863,1852, 1857, 1841	Individual *CV* above mean
Individual career tenure	2 outliers	1871, 1869	Individual *CV* above mean
Individual career tenure	7 outliers	1864, 1807, 1799, 1806, 1808, 1800, 1814	Individual *CV* below mean
Individual Tenure	3 outliers	1871, 1869, 1868	Individual *CV* below mean

To strengthen the internal modeling and of the potential participants and to capitalize on lessons already learned in exploring the current trend of innovativeness; On the recommendation of Wei and Wu (2013), the researcher found it useful for achieving additional insights into the level of agreement between individual TMT on their firm's innovativeness orientation, innovation performance, and overall company performance. The researcher instigated a questionnaire of 21 questions on innovativeness (Dobni, 2008), which resulted into a Cronbach Alpha of .955, two questions on innovative performance which resulted in a Cronbach Alpha of .691 and three question on organizational performance which resulted in a Cronbach Alpha of .917, on a interrater agreement scale. A high internal agreement consistency was established, from the sample.

Even though Kiefer (2005), discribed reviewing large number of variables, to be overly tedious to inspect for every bivariate relationship, this will provide the researcher with the means to effectively identify unusual cases, although relying on scatterplots alone for this purpose is not fool proof. Cases that appear to be outliers in a scatterplot might not actually be influential in that they produce distorted or otherwise misleading results. To increase the quality for more specific outliers the researcher narrowed down the multiple independent variables of TMT to a singular out-put, namely demographic diversity. Researchers like Chen, Liu and Tjosvold (2005) and Cannella, Park and Lee (2008), achieved this by multiplying various combinations of individual demographic variables. Wei and Lau (2012) and Pelled, Eisenhardt and Xin (1999) used and interaction diagram on the independent and dependent variables with each other by calculating the mean and standard deviation of the various diversity indexes. Simsek, Veiga, Lubatkin and Dino (2005) simply just added the dependent and independent variables together. The researcher used a multivariate outliers search for unusual combination of values for a number of variables. In the analyses, the search concerned with multivariate demographic outliers combined with the dependent variables in the data analysis, by employing the Mahalanobis distance.

Measuring instruments: Applying the Mahalanobis Distance.
Applying the Mahalanobis distance (*MD*) helped to measure the extent to which an observation had a multivariate outlier with respect to the set of explanatory variables. (Orr, Sackett, & Dubois, 1991). Although it is possible to determine critical cut-offs for extreme *MD*, s under certain conditions. The researcher employed to hold onto graphical methods for inspecting *MDs* because distribution assumptions may be dubious and values just exceeding a cut-off may still be legitimate observations in the tail of the distribution. *MD* indicates how far the case is from the centroid of all cases for the predictor variables. A large distance indicates an observation that is an interesting outlier for the predictors (Aguinis, Gottfredson, & Joo, 2013).

The selection of cases that is significantly separated from the rest of the data the researcher tabled for interpretation and to find and represented spread level of significance.

Table 3: Total of individual TMT outlier identified Mahalanobis distance

Variables	Model 1	Model 2	Model 3
Model predictors: N = 133	Demography	Demography × innovativeness	Demography × innovativeness × performance
R	.413	.751	.775
R square	.171	.564	.600
Adjusted R square	.113	.429	.448
Standard error	33.850	27.151	26.708
MD residuals ($M \pm SD$)	7.935 ± 3.950	28.766 ± 15.419	33.726 ± 18.291
MD -: Minimum	1.863	8.625	11.043
MD -: Maximum	21.080	80.424	86.694
Outliers identified	7	7	7

Even though statistical outliers were identified, the researcher still maintained the option to select and make the outlier part of further investigation, through the outlier model. Eight outliers were selected, and agreed for further interviewing.

4. Procedure

The cases in this research were selected to maximize the differences in comparative groups to bring out the widest possible variation in configurations of TMT innovativeness. This includes taking account of the demographic profiles which the literature has demonstrated to be associated with TMT activity (Meissner & Sprenger, 2010). The qualitative reliability was achieved and is consistent with the approach of Field's (2005) processes because the researcher documented all interviews visually and auditory as possible (Stephenson, 2012) which suggests and included checking transcripts for accuracy and tight control over codes during analysis to avoid code-drift by using a control mechanism such as a codebook (Field, 2005). The researcher aimed at ones off structured interviews of 1-2 hours duration was conducted with each core respondent. Interviews will either be visually or auditory recorded and then coded using computer-aided qualitative analysis software. Data analysis was conducted in the tradition of grounded theory, which is only rarely seen in the TMT literature. This was followed by within-case and cross-case analysis and comparison with the literature.

The first interview question with the case subjects focused on understanding the individual's business concept and company innovation capacity and innovation orientation, while the second interview concentrates on the personal and work history, and experience with behaviour integration, and interaction with the power perspective during the innovativeness process. The researcher specifically probed for intellectual and emotional connections in terms of their development. The qualitative project, created a snapshot summarized in Model 2. The data summarized and displayed in Model 2, after the discussion, can be considered an important step during the qualitative data analysis or the writing up stages (Yin, 2011). The data display in the graphic format is a way of portraying eight different interviews of information succinctly and efficiently, illustrating details provided in longer textual information. Visual displays provide a multidimensional space to organize data and show connections between different pieces of relevant data. The number one to eight indicate, the particular outlier interview, while the connector line toward the individual nodes indicate the central thought. The nodes are connected into a central theme which summarize, the outlier's perspective on perspective on central concerns on the perception and elements or innovation driver

that will stimulate innovativeness. Central to the thoughts is that Namibian TMT's need an enabler to perform.

Categorisation of Main Themes Identified

The Namibian, interesting outlier selection, reflected on innovation capacity as interviewees note, and agreed that they believe that you actually need some sort of critical element or elements to create innovation capacity (Interviewee 1; Interviewee 5, Interviewee 6 and Interviewee 7), "You need to create the right structures for example a dedicated department where the ideas flow and people can play with scenarios and theories, and where the coffee-time talk is not dominated by the day-to-day production challenges, but by innovation and strategic thinking" (Interviewee 1), "We need creative people in a job or organization where creativity is promoted, will thrive" (Interviewee 5). "We need to have international standards that we can review and comply with especially if it is established and shown to work" (Interviewee 6). Interviewee 1, also noted you need is "creative people in a job or organization where creativity is not promoted, (they), will not perform to his/her ability" Opposite is also true – person with little capacity for innovation, will not do well in a company where innovation is a way of life". Interviewee 2 and Interviewee 3, make a clear statement that "innovativeness is not only the job of the graduates and" learned" employees, but of each worker that can identify an opportunity to impact on safety, health, environment, profits, and cost"

"But this people should have the change to raise their ideas in comfortable setting" (Interviewee 6). Interviewee 1, made an argument for pro-diversity and noted: "Then you need to resource the structure (department) with people who have the right practical experiences and have demonstrated superior performance, creativity and enthusiasm in other positions". "Whereby a good blend of "home-grown" and "external" talent is required, as is diversity of age, race, professions, skills and views" (Interviewee 1). "We should not be afraid of being local" (Interviewee 6). Interviewee 3, supports the pro –diversity notion of Interviewee 1, but add a safety component that "manager's innovation must supports your legal compliance as this system is based on management commitment to provide a safe and healthy workplace. It also supports management so that all employees are committed to work safely. "I see no failures in the system except that it contains a lot of paperwork" (Interviewee 3). Interviewee 1, considers R&D as critical but an independent department, but add "that the department responsible for R&D should continue to have a strong link into the business, so that innovation can flow both ways, and that those innovations created in the production environment flow into projects, and that projects initiatives are readily accepted into production". Interviewee 6, made a strong argument for modification of technology and that he considered this as innovative, "we modified so many things the suppliers are asking us how". On the question of patenting he replied "this is not a priority". With respect to technological change, interviewees said, that it would depend on whether the company is a leader or a follower. Interviewee 7 made a strong argument that "Innovation could start from shop floor and could be bottom up.", because "employees closely work with a process or a product" (Interviewee 7), "Lucky I have managers that are also engineers and understand me", which can be interpreted as pro-homogeneity to motivate innovativeness. Interviewee 2 and Interviewee 3, made a strong reflective argument that a company innovation orientation should be "encapsulated in one of the company values" Interviewee 3, called it "continuous improvement". But limit innovativeness as a "both technical and operating personnel" (Interviewee 3), but in the same breath answered that "innovativeness is an activity, but can do more to actively promote innovation at the work place"(Interviewee 3 and Interviewee 5). This can be done through a scheme that acknowledge innovative ideas and give people monetary rewards for successful innovativeness"(Interviewee 3 and Interviewee 7).

Innovation orientation

Innovation orientation from the perspective from the Namibian interviewees was almost similar to Nybakk (2012) description of his study on innovation orientation and a learning organization, where an organization or business creates and uses knowledge to obtain a competitive advantage, especially if the process involves strategic innovation which is executed across the whole organization. The interviewee described commitment to learning, shared vision, open-mindedness and intra-organizational knowledge sharing as innovation orientation that helps a company to acquire, disseminate and share information (Wang, Libaers, & Jiao, 2014).

As interviewees note: "Proper research into projects"(Interviewee 1; Interviewee 6 and Interviewee 7), "Trick is to be able to understand issues at both a very high holistic level as well as being able to dig into the detail where and when it is required" (Interviewee 5), "You should have the skill for understanding and solving problems" (Interviewee 5). Interviewee 1, provide critical advice for managers to "Look beyond the both successes and failures – through lessons learned over years of experiential learning", she describes this form of innovation orientation in an example of "Turning "white elephant" into a critical information gathering tools"(Interviewee 1). Interviewee 5, had a more individual opinion and noted that: "I was always successful when the people were convinced that we were doing the right thing. This always involved good communication that included: firstly, the reason(s) for change, and secondly the impact on the organization and impact on individuals, but "most importantly is to learn from things that went wrong, and to know when to let go of a concept" (Interviewee 1), and "how to apply learning from failures to other problems" (Interviewee 6). But from experience, Interviewee 5 noted that where "projects failed (is) were people did not buy into processes and the processes did not receive sufficient management support. Interviewee 6, sees a lack of support and isolation as the ideal opportunity for creativity to flourish, because "we are so far from everywhere else we learnt to do it our self until supplies arrive". "We learn to make it work no, because we had to" (Interviewee 7), "We're forced to innovate; it's a drive to survive in the Namibian market" (Interviewee 7). Interviewee 2 and Interviewee 3, make a strong argument for the shop floor or bottom-up approach, "Innovation or continuous improvement is important for all areas of business, it is not related to technical issues only". "It is a measurement of doing the same thing at a different way and getting a better result". "Innovation comes most effective from people inside the organization – the people on the shop floor, and not from outside consultants" (Interviewee 3).

Behaviour integration
Overall all the interviewees operated from the value-in-diversity and integration and learning perspective. As the interviewees noted, this will aim to ensure that organization s, "furthers the goal of creating an inclusionary environment" (Interviewee 1, Interviewee 2, and Interviewee 3). The interviewees had a limited understanding about the differing perspectives among members can increase the likelihood of person-related conflicts that may impede opportunities to coordinate and cooperate with one another. But agreed "therefore, integrative efforts are indispensable when an organization seeks strategic coherence" (Interviewee 5 and Interviewee 7).

Interviewee 2; Interviewee 3; Interviewee 4 and Interviewee 5, all concluded, infusing a shared-value vision, by enhancing social interaction to better integrate TMT embedded values, or implementing a contingency reward system. As the interviewees further note: "The behaviour of the executive is absolutely critical in innovation and success – if top management has a burning desire to create future value, and continues to talk with passion and enthusiasm about the innovations and opportunities" (Interviewee 1), "even in the face of setbacks" (Interviewee 1), "A common goal, understood by all" (Interviewee 5), "then the rest of the organization also believes" (Interviewee 1), "Buy-in from everyone" (Interviewee 5), "I firmly believe that the vision to achieve something comes first, and then people rise to the occasion and surprise us!" (Interviewee 1), "Commitment" (Interviewee 5). "More focus" (Interviewee 6), It is a constant battle to fight negative perceptions, shortage of capital, but as leaders, we need to also protect our s from some of these impacts so that they can flourish in an environment where they feel valued and empowered (Interviewee 1). "s are goal-oriented groups that share a common goal among members and task-driven groups that are formed around frequently occurring problems" (Interviewee 7).

Interviewee 6, and Interviewee 7, promote "listening with intent, and not to judge" as critical for behaviour integration, but in the same breath " we appoint people without any reason, a lot do not make sense", "We run a double system, which frustrates people more than less people" (Interviewee 6, and Interviewee 7). Proper behaviour integration will happen be overcome when we "get the right priorities, people first, then all will follow" (Interviewee 5). "I honestly think the focus should change, from beautification to proper behaviour (Interviewee 6). This differs from groups in that they "consist of highly differentiated and interdependent members", members bring "different knowledge and skills that apply to the s" tasks", and "s consist of interdependent members who interact over time (Interviewee 1; Interviewee 3; Interviewee 6 and Interviewee 7).

Power perspective

Questioning the outliers about power and authority perspective as part of innovativeness, most interviewees were reluctant to provide in-depth information. This limited the researchers questioning. The social identity, social categorization, and similarity-attraction theories predict a positive relationship between diversity and conflict (Williams & O'Reilly, 1998). The interviewees did not see power and authority as a creation of knowledge and the discovery of insight by group members and that innovativeness appears to depend on the presence of diverse viewpoints and perspectives about the task. Upon further investigation and reflecting about the answers and suggestion it seemed, that these outlier, individuals formed naturally in organizations, the most common bases for group formation are similarity (Ancona & Caldwell, 1992), proximity (Cannella, Park, & Lee, 2008), and familiarity.

"All I would add is that one cannot forget about innovation, in a top-down, in a hierarchal organization where employees are afraid to speak up or where the boss is always right" (Interviewee 1). "In order to innovate, it should be okay to fail or to be wrong sometimes" (Interviewee 1), so "A flat, flexible matrix structures work best in this environment" (Interviewee 4). "In our strategic projects, no-one had any permanent titles or roles – depending on the problem project we had, we simply put project s together who had the right skills" (Interviewee 1, Interviewee 3, Interviewee 5 and Interviewee 7). When queried about the different task roles Interviewee 1; Interviewee 3 and Interviewee 5, answered "People were also working on several projects at once, so in one project you might be the project manager, and a colleague your design engineer, and on another project the roles might be reversed". "Role clarity is then important, but people then really start valuing each other for their unique contributions (Interviewee 7). It also serves to quickly point out if someone on the team is not pulling their weight..." (Interviewee 2 and Interviewee 4). Interviewee 5, provide a sign of hope for the pro-conflict innovativeness link "I always considered well managed conflict a good thing. Normally conflict is a sign of commitment and/or passion and the manager should realize that to get alignment between individuals". He also answered that, "I do not often use "power authority", but sometimes it is necessary normally in the interest of time, (Interviewee 5).

In conclusion there were ethical considerations with power and authority of TMT's as Interviewee 1, made an ethical observation that she observed that people use their authority for self-enrichment. Nothing can be proved but observing on who receives all the contracts. (Interviewee 2). The leaders appoint people in positions while the appointee is not experienced enough for the position. Decisions are being made from top management which are not always in the best interests of the company.

Interpretation and Visual Articulation of the Results of Interviews

Namibian TM members need a critical element to initiate innovativeness and enable them to perform. This can de deduced of Model 2 and provide ready access to information and convey this message. A particular discovery, or a particular perspective on a specific data is that managers often become obsessed with new technologies and technical development, overemphasizing their importance in the creation of competitive advantage. A strong message the findings might convey might suggest that managers might overestimate current technical capabilities to the extent that they become myopic in their assessments of alternative factors that could also constitute sources of long-term value creation.

This is where Dobni (2008) research on measure of a culture supporting innovation engage behaviours that would value creativity, risk taking, freedom, work, be value seeking and solutions oriented, communicative, instil trust and respect, and be quick on the uptake in making decisions, could support the researcher's findings.

Model 2: The voice of outliers, TM
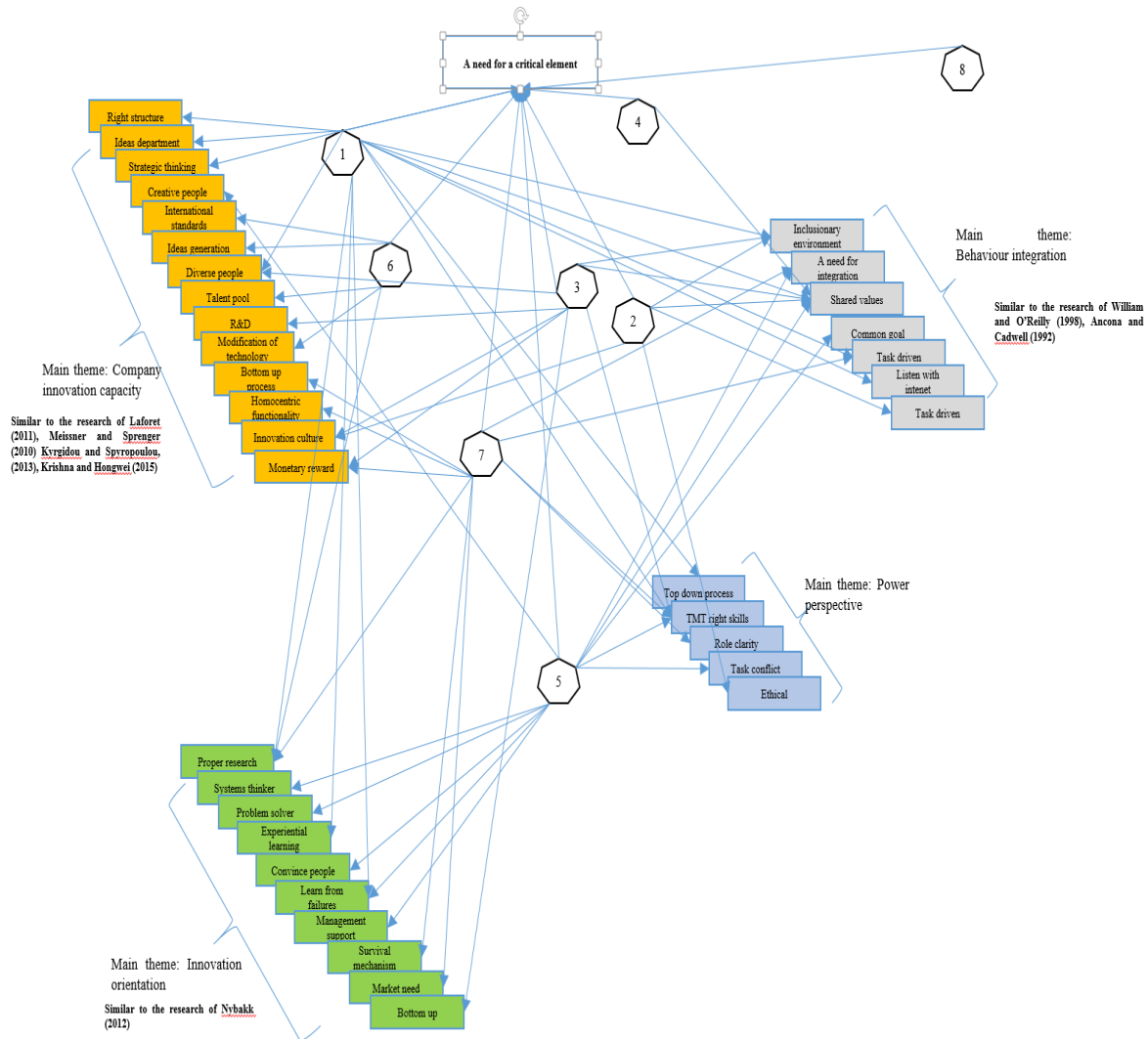
The demographic differences from the outlier selection have proven to be a fruitful avenue for investigation, in that age, gender, nationality, career tenure, tenure, education, education level and functionality have all been demonstrated to distinguish individual managers from dynamics and characteristics. Initially, despite the interviewee's qualitative definitional differences, the outliers perceive innovativeness as an important part of their 'day-to-day' operations, and a successful innovation must deliver higher profit and payback margins. A strong undertone by the interviewees was that their individual companies are at different stages of their innovation cycle and to innovate is to achieve different business goals, but always aiming for a healthy level of profitability, which are also found to be similar in works of Laforet (2011) and Kyrgidou and Spyropoulou (2013). The absence of complementarity innovativeness activities identified by interviewees, echoed the views of selected researchers such as measurement capacity (Cropley, Cropley, Chiera, & Kaufman, 2013) formal practices that complement innovation drivers (Terziovski, 2010) and the importance of inter-functional coordination (Auh & Menguc, 2004).

5. Conclusion

The researcher learned a great deal from these selected top management outliers which was certainly 'performing' individuals. Even though there were still improvements that it can make as the comments of

managers will show, the core of the Namibian innovativeness voice was of core importance, and where this voice fit into the global dialogue, and whether there is a 'road map' of the journey that can be shared with others.

A limitation of most diversity studies is that they consider only quantitative or qualitative analysis of diversity and never attempt to integrate simultaneously, and rather attempt to generalize and understand a larger set of data; than not to deal with the combined effects of diversity across multiple dimensions. This research, I believe that our model is likely to apply to other diversity-related variables more generally and at the same time brings about a wider pool of task-relevant cognitive resources of s, and at the same time elicits social categorization processes, and enhance the understanding and qualifies of a multi-level variable that can elicit positive and negative effects on performance and innovativeness.

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Paper 26

Organizational climate's impact on performance: A South African cement factory case

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Abstract: Performance of an organization is vital to its profitability and continuity. Organizational climate is one of the factors that affect the performance of an organization. The changes that employees experience in their working environment impacts on their performance. Measuring organizational climate influences performance as it shows how invigorating the work environment is for employees. The aim of this research is to determine the variations in organizational climate perceptions based on employee demographics and organizational variables in a cement factory in the North West province of South Africa, and to recommend suitable organizational climate improvement strategies based on the outcomes of the survey. A quantitative, positivistic survey was undertaken at a cement company in the North West province of South Africa. A questionnaire was distributed to employees of the organization and frequency distribution, correlation and t-tests were used to analyze data using SPSS. Findings suggests that a favourable organizational climate is experienced by the cement factory employees. The results show variations of organizational climate experience by employees based on their age, gender, ethnicity, experience, department, education levels and employment levels. For instance, older employees perceived employee empowerment and decision making as favourable whereas younger employees differed. Organizational climate survey provides a suitable ground to start improving organizational performance. There is a need to improve organizational climate dimensions such as conflict management, reward systems, commitment and direction in this organization.

Keywords*: Organizational climate; dimensions of organizational climate; organizational culture; organizational performance;*

1. Introduction

The internal environment of an organization is a working environment and is experienced by the operations members and the changes that take place change their environment and impacts on their performance (Settles, *et al.*, 2007). Organizations must continually monitor the impact of their new and existing programmes and activities on their members by collecting their opinions about the related programmes and activities to know how they affect or will be affected by them (Watkin & Hubbard, 2003). Organizations are advised to continually monitor these environmental changes and employ appropriate strategies in response to the change (Martins & Von Der Ohe, 2003). Organizations are created for a purpose and to accomplish results (Dignum & Dignum, 2012; Rudman, 2003). When the business performance does not achieve the strategic goals and objectives, the performance gap should be determined (Fox, 2006). Organizations are open systems and their performance is generally influenced by the changes in their external and internal environments (Scott & Davies, 2016; Tosi, *et al.*, 1995). The change in the external environment may influence change in financial markets, organization's own consumer markets, political and technological settings.

The study serves as a basis for the understanding of organizational climate in the South African cement industry as no other similar studies could be found, and for the management of the cement factory. The study intends to inform their climate improvement strategies. Organizational climate is felt and experienced by organizational members and to understand the nature of prevailing organizational climate in a particular organization, employees' perceptions are measured to provide that information. The current problem is that the factory does not meet the set expectations which include amongst others, to be a reliable supplier of cement to customers. There are continuous experiences of stock shortages due to problems related to poor factory performance. The organization had tried to compensate the stock shortages with imports, but this has

resulted in a challenging situation for the marketing and sales teams who have to contend with strong price competition in the market (Lafonte, 2007). Management of this organization has therefore requested a study to determine the effect of organizational climate on employees' performance.

The executive management of a multinational company operating in South Africa as a supplier of building materials, is concerned with the overall performance of their cement factory. The management's current objective is to establish the underlying causes of poor performance at this factory and to formulate performance improvement strategies so that the business achieves its aims in the current year (Lafonte, 2007). The aim the research is to determine the variation in organizational climate perceptions based on employee demographics and organizational variables in a cement factory in the North West province and to recommend suitable alternative organizational climate improvement strategies based on the outcomes of the survey.

2. Organisational Climate

What is organizational climate?
Organizational climate is believed to be established by characteristics, demeanor, attitudes and anticipations of people in the organization (Litwin, *et al.*, 1996). To understand the prevailing organizational climate, the answer lies within the employees' perceptions about their working environment. These perceptions can be measured by organizational leaders and be analyzed. On the basis of the reviewed literature it is justifiable to conduct the study with intension the of improving the organizational performance. Organizational climate refers to the quality of the working environment (Hart, *et al.*, 1996). It also refers to the organization's psychological atmosphere (Ali & Paitnik, 2014; Kline & Boyd, 1991). The employees' attitudes, mutual perceptions, behavioural patterns and feelings about their jobs, the organization and the work environment are vital to the success of the organization (Ali & Paitnik, 2014; Rogg, *et al.*, 2001).

Organizational climate and culture
The terms organizational climate and organizational culture are often confused for meaning the same thing and often used interchangeably. According to Ali & Paitnik, (2014), organizational climate is the mutual perceptions, attitudes and actions whereas organizational culture is the mutual rudimentary assumptions, values and beliefs. Organizational culture is defined as mutual basic assumptions, values and beliefs that exemplify an environment and are passed on to new employees as the correct way to reflect and feel communicated by the myths and stories that workers share about the organization's survival when it solved problems associated with internal and external changes (Schneider, *et al.*, 2013; William, 2002). Organizational climate is defined as mutual perceptions of the significance accredited to procedures, rules and actions workers observes and the actions they perceive as getting rewarded, endorsed and anticipated (Schneider, *et al.*, 2013).

Features of organizational climate and organizational culture plays a prominent role in measuring managerial effectiveness concerning occupation and the business holistically (Ali & Paitnik, 2014). Organizational climate and organizational culture provides complementary perspectives for comprehending the incorporative experiences of employees in their work or organizational environment (Schneider, *et al.*, 2013). Organizational climate provides the conditions for building up organizational culture (Medina, 2012).

Organizational climate and organizational performance
Individual performance of employees is the foremost contributor to organizational performance (Rudman, 2003). Research has found that an individual's perception of the work environment is especially relevant when measuring individual performance because an employee's understanding of the organizational climate determines how they respond to the work environment (Settles, *et al.*, 2007). Employees bring organizational strategy to life and this is not always easy to implement because the prevailing organizational climate influences their behaviour (Rogg, *et al.*, 2001; Litwin, *et al.*, 1996). Organizational managers may come up with excellent strategies but without the relevant relationship with the employees these strategies tend to fail. A high performance organizational climate is characterized by employees who do what is necessary to achieve organizational results (Watkin & Hubbard, 2003).

A negative organizational climate is linked to negative job outcomes and has long-term impact on an organization's performance (Cannon, 2004; Higgins & Thomas, 2001). A poor organizational climate tends to discourage employees from being optimistic about the improvement of the current situation. It leads employees to disengage from their jobs and the organization. The usual results of poor organizational climate are absenteeism, high turnover, dissatisfaction and low productivity (Watkin & Hubbard, 2003). Approximately 80% of performance improvement opportunities originate within the organizational climate (William, 2002). Measuring organizational climate indicates how energizing the work environment is for employees and as such it is a useful tool in rejuvenating business performance (Watkin & Hubbard, 2003). Measuring organizational climate can assist leaders better understand the effect they have on the motivations and performance impact of their subordinates (Watkin & Hubbard, 2003).

Dimensions of organizational climate

Organizational climate studies defines the numerous measures of climate or climate dimensions and major debates about what should be measured (Cloete, 2011; Martins & Von Der Ohe, 2003). For the purpose of this study the measure of organizational climate will be limited to the following 13 climate dimensions due to their association to factors that affect individual performance (Fox, 2006), The organizational climate dimensions are: role clarity, reward system, team work and support, empowerment, decision making, communication, innovation, conflict management, morale, commitment, respect, structure, organizational commitment, management style, direction, training and development, and job satisfaction (Stetzer, *et al.*, 1997). In this research only 13 dimensions are used. These climate dimensions can be further grouped based on task-related scales, motivation-related scales and team-related scales, these are explained in tables 1 to 3 hereafter. A questionnaire was developed using these dimensions. Items in tables 1 -3 refers to the number of questions per dimension in the questionnaire.

Table 1: Task-related scales

Task-related scale		
Dimension	*Items*	*Definition*
1. Role clarity	7	A sense of understanding of the organization's goals and policies, of being clear about his/her job. The feeling that things are organized and run smoothly, as opposed to being confused.
2.Communication	8	The openness and effectiveness of communications systems within and between levels
3. Direction	7	The extent to which employees understand the company vision and long term aims.
4. Job satisfaction	7	The extent to which employees are satisfied about their jobs.

Table 2: Motivation-related scales

Motivation-related scale		
Dimension	**Items**	**Definition**
5. Reward system	10	Feeling that people are recognized and rewarded for doing good work, contrasted with feeling that criticism for poor performance is more likely than recognition for good performance.
6. Innovation	5	The level of interest in new ideas and innovative approaches.
7. Commitment	7	A feeling of continuing commitment to goal achievements related to acceptance and realism of goals, involvement in goal-setting and continuing evaluation of performance against goals.
8. Empowerment	7	The extent to which employees are trained and developed in the organization.
9. Decision making	7	Determining the extent to which employees partake in decisions that affect their work situation.

Table 3: Team-related scales

Team-related scale		
Dimension	*Items*	*Definition*
Team work & support	7	The perceived helpfulness of the managers and other employees in the group; emphasis on mutual support from above and below.
Team-related scale		
Dimension	*Items*	*Definition*
Conflict management	5	Conflicts are an integral part of organizational activities. The perceptions of organizational members about conflict management systems are the focus of this section.
Morale	8	Employees' perceptions on challenges and encouragement efforts.
Respect	5	The importance to recognising the influence of religious and secular values in business setting.

Organizational climate dimensions include the dimensions on the formal level, management practice, structure, policy, task specialization, decision making, standard and reward. On the informal level, it refers to employee needs, identity, responsibility, interactive communication, support, warmth, conflict handling and information sharing (Stetzer, *et al.*, 1997). The interpersonal dimensions include the nature of managerial support with its directive and interactive properties. The directive refers to role clarity, job standards, structure, managerial effectiveness and job satisfaction and whereas interactive includes communication, team functioning, conflict handling and reward (Cillier & Kossuth, 2002).

Nature of organizational climate
Organizational climate is established by characteristics, demeanor, attitudes and anticipations of people in the organization (Litwin *et al.,* 1996). To understand the prevailing organizational climate, the answer generally lies in measurement and analysis of the employees perceptions about their working environment.
Some studies found organizational climate to be a lever that can be used to determine organizational capacity to cope with changes. For instance, some organizations proactively measure their employees' attitudes towards a proposed change prior to the actual implementation and use that information as a lever to improve the proposed change and process where necessary. By so doing they gain the advantages of a smooth transition when the change is finally implemented (Watkin & Hubbard, 2003).

It is important for organizational leaders to be aware of the nature of the prevailing climates in their organizations as Settles *et al.,* (2007). A positive climate generally implies that employees are likely to support and commit themselves to new change, while a negative climate suggest that resistance to change is more likely to occur (Settles, *et al.*, 2007). Their study also found that a negative organizational climate is one of the reasons why even good strategies fail. This implies that when the influence of factors such as organizational climate are disregarded, even a highly regarded strategy is at risk of failure due to lack of employee support or commitment to its implementation.

Organizational climate is considered to be a multi-dimensional phenomena; it is descriptive of the nature of employee's perceptions of their experiences with an organization (Clark, 2002; Stetzer, *et al.*, 1997). The descriptions of climate are referred to as dimensions and they measure perceptions first and foremost and secondly describe activities (Clark, 2002). This study is concerned with the employee's perceptions and hence the description of the nature of organizational climate which prevails within their working environment and does not intend to evaluate the factory's activities in any way.

Studies in organizational climate
Research does not occur in a vacuum but is intimately bound to socio, historical, contextual and temporal factors such as political development of South Africa from apartheid to democracy. This has had an important effect on the kind of research found in the business management sciences. Though business management sciences are largely of western perspective there is now a gradual shift to examine research from African perspectives. For example, Miller in his study suggested that when studying organizational climate in South Africa, the organizational climate dimensions should reflect the new democracy which empower women to

play equal roles with their male encounter parts (Miller, 2001). Equality in terms of race is another socio problem they suggest should be measured as one of organizational climate dimension in the South African context believing that it will assist organizations to perform in equity issues. This study intends to contribute to research by the studying the local cement factory therefore contributing to the African perspective.

Sveiby & Simons, (2002) conducted a study on the collaborative climate and effectiveness of knowledge work. They argued that collaborative climate is one of the major factors influencing effectiveness of knowledge work. The study found that collaborate organizational climate tends to improve with age, education level and managerial role. However, gender was found to have no impact on the perceptions of collaborative climate. The study also found that there was a significant difference in view between older and younger employees (Sveiby & Simons, 2002). Older employees regarded the collaborative climate to be more favourable than their younger colleagues. Some of the explanations for the differences in perception amongst employees that identified were as following:

Employees with high education find it easier to influence their own environment. They are less vulnerable than lower educated employees as they can easily access knowledge and interpret information more easily. This conclusion highlights that the climate may be favourable but only those with higher education can experience it. (Gray, 2001)studied association between projects outcomes and social management climate of those projects. the findings were as follows: There was a hard-organizational benefits derived from active promotion of organizational climate in which participants had maximum involvement in identifying their own targets and goals; they feel free to question, challenge and contribute to the decisions of more senior people. Their suggestions and ideas are actively sought and, once elicited, are valued and treated with respect (Gray, 2001). Threats, uncertainty and unfairness were found to be linked to stress and antithetical to the well-being of individual project personnel in a variety of ways (Gray, 2001).

Research objectives
The main research aim is to determine the variation in organizational climate perceptions based on employee demographics and organizational variables in a cement factory in the North West province and to recommend suitable alternative organizational climate improvement strategies based on the outcomes of the survey. To achieve the research aim it has been divided into research objectives:
- To determine employees' perceptions of the environment in which they work, by means of organizational climate survey.
- To determine how the organizational climate varies according to demographic and organizational variables.
- Recommend suitable alternative organizational climate improvement strategies based on the outcomes of the survey.

3. Methodology and Design

This research used the quantitative methodology to satisfy the research objectives and answer the research questions. Quantitative research collects data in the form of numbers, and applies data collecting techniques such as surveys and use statistical types of data analysis (Durrheim, 2014). Quantitative research fits in circumstances where all the imperative variables are known in advance. A positivistic survey approach was employed to meet objectives. Since the methodological implications of survey approach are questionnaires, structured observation and structured interviews (Saunders, *et al.*, 2016), this research used questionnaires to gather data.

Participants
The study is limited to the cement factory only and do not cover the raw material quarry and head office staff due to time and costs constraints. The factory has 237 permanent employees and these comprises of supervisors, middle managers and non-managers. The factory is made up of 7 departments made up of diversified employees whereby the heterogeneity of employees is in terms of age, gender, experience, ethnicity, education levels and employment levels. These are shown in table 4 as independent variables of the

questionnaire. The questionnaire was distributed to a stratified random sample of 100 employees. The strata were based on the department, so that a representative sample can be used.

Measuring tools

Questionnaires gather data by soliciting answers from a sample or population to precisely the identical set of questions (Coldwell & Herbst, 2004). They are frequently utilized as part of survey strategy to gather descriptive and explanatory data concerning attitudes, behaviour and attributes (Saunders, *et al.*, 2016). The questionnaire containing demographical information such as age, gender, race, departments was used. The study measured employees' attitudes towards their working environment, and for that purpose attitudes scale technique was employed.

Attitude scales typically yields a total score indicating the direction and intensity of the individual's attitude towards for example a certain organizational practices. The construction of the scales is such that different questions are designed to measure a single attitude. The survey yields a single score showing the individual's overall attitude towards for example, an organization's reward systems (Anastasi & Urbina, 1997). One of the major attitude scales is the Likert scales.

The Likert-type scale begins with a series of statements each of which expresses an attitude that is either clearly favourable or clearly unfavourable. Items are selected on the basis of the responses of persons to whom they are administered in the process of test construction. The principal basis for item selection is internal consistency, although external criteria are also employed when available. Likert scale calls for a ranked response to each statement, and the response to each statement, and the response is expressed in terms of categories such as: Strongly agree (SA), Agree(A), Undecided(U), Disagree(D) and Strongly disagree (SD).

To score the scale, response options are credited 5, 4, 3, 2, and 1 from the most favourable to the least favourable end. The sum of terms credits represents the individual's total score, which must be interpreted in terms of empirically established norms (Anastasi & Urbina, 1997). In order to be able to achieve the research aim, which is determining what is employee's perceptions of their organizational climate and address the research question by addressing the sub-questions organizational climate has been categorized and subdivided into key themes as identified by Clark (Clark, 2002).

The questionnaire had the dependent and independent variables. Table 4 shows the independent and dependent variables.

Table 4: Dependent and independent variables

Independent variables	Dependent variables
Age group	Job satisfaction
Experience	Commitment
Level of employment (current position)	Moral
Gender	Clarity
Race	Direction
Departments	Communication
Educational levels	Reward system
	Empowerment
	Decision making
	Conflict management
	Respect
	Team work and support
	Innovation

The final questionnaire consisted of 90 questions grouped into 13 dimensions. The questions are to be answered on a five-point interval scale, the highest anchor signifies the highest strongly agree whereas the lowest anchor signifies strongly disagree. Corporate climate questionnaires (Furnham, 2000) are used as the basis for the questionnaire. Some original climate dimensions were remove and some replaced to adapt the

questionnaire for the purpose of this study. These climate dimensions are represented as dependent variables in table 4.

Validity and reliability
To ensure validity of the measuring instrument, the questionnaire was pilot-tested prior to its application to collect data. The main purpose of doing so was to refine the questionnaire so that respondents will have no problems in answering the questions and there will be no problems in recording the data. The pilot data was also used to check if the data collected enable the investigative questions to be answered. Pilot testing the validity of the questionnaire included evaluating the questionnaire on clarity of instructions; average time it takes to fill-in the questionnaire; which questions did the respondents feel uneasy to respond to; which questions were ambiguous or unclear; and any other comments. Another method employed to check internal consistency is application of the alternative form, which offers some sense of the reliability within the questionnaire through company responses to alternative form of the same question or groups of questions. These questions are sometimes referred to as check questions (Saunders *et al*, 2016). The questionnaire reliability was determined by means of the Cronbach's-Alpha coefficient. The average Cronbach's-Alpha in this study is 0.80 and falls within the acceptable range for social research.

4. Analysis and interpretation of the findings

Data was analyzed used descriptive statistics of mean and standard deviation, as well as inferential statistics using Spearman's correlation coefficient and independent t-tests comparisons. The analysis was done using Statistical package for the social sciences (SPSS).

Perception of organizational climate by all participants
The results presented in Table 6 for the mean and standard deviation are presented here. Employees scored high on organizational dimensions such as clarity 3.71(SD=1.04), respect 3.58(SD=0.99), Team work and support 3.34(SD=1.05) and communication 3.33(SD=1.05) respectively. Although most employees scored high on the above climate dimensions, they also scored low on climate dimensions such as, conflict management 2.78(SD=1.07), reward system 2.81(SD=1.15), commitment 2.85(SD=1.24) and direction 2.94(SD=1.08) respectively.

Table 5: Perceptions on organizational climate

More favourable dimensions	Favourable dimensions	Less favourable dimensions
job clarity,	job satisfaction,	conflict management systems
team work and support,	morale,	organizational reward system
communication	empowerment,	Commitment
respect	decision making and Innovation	Direction

The study found that employees generally perceived climate dimensions such as job clarity, team work and support, communication and respect as more favourable. This included also climate dimensions such as job satisfaction, morale, empowerment, decision making and innovation were also perceived as favourable, whereas, dimensions such as conflict management, reward system, commitment and direction were less favourable. This is summarized by table 5.

Variation of organizational climate according to employees' demographical information
These findings are also presented in Table 65. The perceptions of organizational climate according to employees' demographical information such as age, gender, education level, race, employment level, experience and departments was determined and the summary of the findings as presented below were found consistent to the findings of the study conducted by Sveiby & Simons (2002).

Climate perceptions according to employees' educational levels
The study found only one significant difference in perception of organizational climate by employee's educational levels and the difference was in terms of the levels of commitment to the organization. Perceptions of organizational climate were compared between two employee groups (i.e. employees who are

academic graduates and those with only elementary education), and it was found that employees with only elementary education affirmed that they would be happy to spend the rest of their career with the organization, whereas graduate employees would not be happy to do so.

Table 6: Summary of organizational climate perceptions

Climate dimension	General perceptions		Climate perceptions according to employee's demographical information						
	Mean	Standard deviation	Gender	Race	Age	Experience	Educational levels	Departments	Employment levels
Clarity	3.71	1.038							
Communication	3.33	1.046				*			
Reward system	2.81	1.152						*	
Empowerment	3.18	1.189			*				
Decision making	3.11	1.124			*	*			
Innovation	3.15	1.029		*				*	*
Conflict management	2.78	1.074				*			
Commitment	2.85	1.238			*	*	*		
Morale	3.22	1.209	*						
Respect	3.58	0.99	*			*		*	
Direction	2.94	1.076							
Job satisfaction	3.28	1.256	*					*	
Team work and support	3.34	1.052		*					
*. is significant at the 0.05 level (2-tailed).									

Graduate employees form more than half of the total employee population in this case. The findings suggest a poor commitment climate for graduate employees in the organization. It might be advisable for the organization to determine the reasons why most of employees in this category have less intention to stay with the organization and improve on the retention programmes.

Climate perceptions according to employees age groups
The study found three significant differences in perception of organizational climate according to employees' age groups. The perceptions of organizational climate were compared between older and younger employees in the organization and significant differences were found in terms of the perceptions of commitment to the organization, employee empowerment and decision making. Older employees tend to be more committed to the organization and perceived employee empowerment and decision making as favourable, whereas younger employees on the other hand tend to differ on all three instances. The younger employee group forms 41% of the total employee population and the findings suggest that most of employees in this category had less intention to stay in the organization, mostly because they do not feel empowered to do their jobs and included in decisions that directly affect their work.

Climate perceptions according to employees' employment levels
Only one significant difference was found in perception of organizational climate by employment levels in terms of innovation climate. Employees in non-managerial positions tuned to be less motivated to be innovative in their work as compared to those in managerial positions. It would be advisable for the organization to determine the causes for poor innovation climate around employees in non- managerial positions, because they form a largest part (72%) of employee population and including them in innovation could increase organization's innovation capacity. Living behind the largest part of employee population in a poor innovation climate is somehow limiting organization's innovation capability.

Climate perceptions according to employees' experience in the organization

The perceptions of organizational climate were compared between most experienced and less experienced employees in the organization and there were few significant differences found in terms of dimensions such as commitment, decision making, communication and conflict management. Most experienced employees in the organization tend to be more committed to the organization and perceived decision making as inclusive and communication and conflict management systems as effective, whereas, less experienced employees in the organization perceived these dimensions as less favourable. Most experienced employees did feel somehow less respected in the organization as compared to less experienced employees.

Climate perceptions according to employees' gender

Interesting findings were found in perception of organizational climate by gender in terms of respect, motivation and job satisfaction. Female employees feel respected in the organization and motivated and they have high job satisfaction level as compared to their male counterparts.

Climate perceptions according to employees' departments

Measurement of perception of organizational climate by departments yielded several interesting significant differences between administrative and operational departments. Employees in administrative departments tend to feel generally respect in the organization. They are encouraged to be innovative in their work, and they also have a high job satisfaction and perceived reward systems as satisfactory, compared to employees in the operational departments.

Climate perceptions according to employees' racial groups

Two significant differences were found in perceptions of organizational climate by racial groups. The two significant differences were in terms of perceptions of team work and support, and innovation climates. Black employees perceived team work and support climate as more favourable, White employees also, tend to be more encouraged to be innovative in their work, whereas black employees felt not encouraged to be innovative in their work.

Relationship between climate dimensions

The relationship between the climate dimensions was determined using the Spearman's rho correlation coefficient. The results are presented in Table 7 in the next page. This analysis is used to determine the strength and direction of relationships. The absolute size of the correlation amongst climate dimensions ranges from 0.082 to 0.763. This shows that these dimensions go together. All associations were found to be positive. A positive correlation indicates that high score on one variable is associated with high scores on the other variable and low scores on one variable going together with low scores on the other variable (Bryman & Cramer, 2004). High scores on morale were associated with high scores on employee empowerment($r=0.707$), innovation($r=0.689$) and direction($r=0.763$). Whereas, high scores on decision making were also associated with high scores on employee empowerment($r=0.719$). Low scores on conflict management were associated with low scores on job satisfaction($r=0.239$), job clarity($r=0.240$), respect($r=0.082$), and innovation($r=0.689$). Low scores on reward system were also associated with low scores on team work and support($r=0.249$) and respect($r=0.228$).

Interpretation of the results

Employees in the organization have clear goals and objectives for their jobs, as well as the knowledge of exactly what is expected of them in their departments. Employees can plan better and achieve organizational goals when role clarity and direction are clear. When communication is effective amongst colleagues and superiors, and there for less misunderstandings and mistakes occur resulting in better performance of duties. Employees feel respected and good relationships among co-workers leads to better teamwork and synergy, which results in better performance. Individuals feel that their contributions matter in achievement of the organizational goals when they feel respected by their colleagues and superiors. Good relationships among co-workers leads to better teamwork and synergy, which results in better performance. Employees feel that their contributions matter in achievement of the goals when they feel respected by their colleagues and superiors.

The less favourable confidence in the organizational conflict management systems as well as the organizational reward system is a concern as it can impact employees' performance negatively as may result in high employee turnover, absenteeism and job dissatisfaction. Employees need to have a confidence that conflicts are handle fairly and amicably in their work place to commit. to be less favourable, and they have low intentions to be with the organization.

Limitations of the study

Although the research covered most things that needed to be covered, there were however some areas which under certain circumstances could not be covered due to time and resource. It should be noted also that climate surveys are continuous improvement tools, i.e. they survey must be conducted periodically to validate the findings, and therefore the findings of this study are not ultimate but this study can be used as a basis for follow up surveys. It is important also to note that the research only covered 13 climate dimensions whereas there are still more other dimensions that are not covered by this research, such as organizational structure. The study was limited to only one cement factory and as such the findings do not describe the whole cement manufacturing industry.

Table 7: Relationship between the Climate dimensions

Climate dimension	1	2	3	4	5	6	7	8	9	10	11	12
Clarity												
Communication	0.594**											
Reward system	0.402**	0.439**										
Empowerment	0.590**	0.639**	0.444**									
Decision making	0.441**	0.566**	0.346**	0.719**								
Innovation	0.483**	0.383**	0.390**	0.586**	0.600**							
Conflict management	0.240*	0.320**	0.505**	0.373**	0.345**	0.219*						
Commitment	0.392**	0.498**	0.480**	0.605**	0.454**	0.395**	0.531**					
Morale	0.518**	0.565**	0.421**	0.693**	0.707**	0.689**	0.464**	0.579**				
Respect	0.306**	0.356**	0.228*	0.409**	0.452**	0.418**	0.082	0.259**	0.556**			
Direction	0.584**	0.574**	0.520**	0.646**	0.606**	0.664**	0.458**	0.606**	0.763**	0.378**		
Job satisfaction	0.332**	0.592**	0.434**	0.614**	0.566**	0.437**	0.239*	0.519**	0.636**	0.403**	0.505**	
Team work and support	0.467**	0.551**	0.249*	0.452**	0.506**	0.367**	0.289**	0.446**	0.527**	0.422**	0.436**	0.470**

5. Implications of the Research

The observable implications of the findings above are discussed in this section as follows:
- The organization stands to suffer high employee turnover, if this is not already a case. The organization is at the risk of losing new and young employees because they tend to be neither motivated nor challenged to commit to the organization. Losing and failing to retain new and young employees may have a negative impact in the organizational long term strategy when the older generation retires.
- The following important strategic components may be lost, namely: continuity, intellectual capacity, skills and people as important strategy implementing resources. When the older employees retire

and young employees are not retained. The Organization limits its strategic advantage by not encouraging all employees to participate in continuous improvement of work methods, procedures, and many other activities all employees are involved in daily and can make a positive contribution if the climate for innovation is developed.

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Recommendations

- It is advisable for the organization to review the ability of its retention policies to retain new and young employees, because a firm's success in a progressively more competitive global economy is reliant on its ability to recruit, retain, and appoint high quality employees (Scweitzer & Lyons, 2008).
- It is also a recommendation of this study that the organization should develop and implement programmes that assist employees to identify and become involved with the organization and feels an emotional attachment to it.
- Training of supervisors and middle managers on the strategic importance of organizational innovation and the importance of including all stake holders.
- Link rewards to performance to encourage under performers.
- Evaluation of induction programmes. Programmes like mentorship should be considered to facilitate the orientation of young and new employees.

Suggestions for further studies

A further study is recommended for the in-depth investigation of what could be the causes of lack of commitment to the organization amongst young and graduates employee population. There are also still more other climate dimensions, such management style, and organizational structure that are not covered in this research and are also of equal importance for continuous improvement of the quality of the working environment in the cement manufacturing industry, future studies can be directed on that line.

Conclusion

In determining the Organizational climate's impact on performance the study has determined employees' perceptions of the environment in which they work by means of organizational climate survey. The organizational climate variations according to demographic and organizational are determined, and suitable alternative organizational climate improvement strategies based on the outcomes of the survey.

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Paper 27

Practical guidelines for role players in the South African skin care industry: Demographic factors and consumer behaviour

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Abstract: The changing and competitive business environment makes it imperative for role players in the South African skin care industry to identify the factors positively influencing consumers' buying behaviour. Consumers' buying behaviour could influence businesses' success. Previous consumer behaviour research in terms of demographic factors focused on gender and in different contexts, mainly developed economies. Previous skin care studies also focused on product clusters. The growth and different conditions relevant to developing countries pose it relevant to conduct a study focusing on the South African market as a developing economy. In addition to gender, other demographic factors may play a role in consumer behaviour. Also, research other than product-specific studies should be conducted in the changing skin care industry. The primary objective of this study was to identify how demographic factors influence consumers' perceptions regarding product variables (tangible and intangible) and consumer buying behaviour in the South African skin care industry. A positivistic quantitative research methodology was followed and a convenience sample of 220 respondents completed a self-administered questionnaire. Further statistical analysis revealed significant relationships among three demographic factors (*Ethnicity, Occupation* and *Average spending*) and selected product variables. In addition, the empirical results presented significant positive relationships between four demographic factors (*Age*, *Ethnicity*, *Occupation* and *Average spending*) and *Consumer buying behaviour* in the skin care industry. Practical guidelines to the skin care industry, on how to market differently to different demographic groups, are highlighted to possibly improve consumer buying behaviour.

Keywords: *Consumer buying behaviour, demographic factors, skin care products.*

1. Introduction and Problem Investigated

The skin care industry is one of the key revenue drivers globally (Euromonitor International, 2017). By 2024 the monetary value of the global skin care market is estimated to be US$ 180 billion (Size of the global skin care market, 2019). In South Africa, the skin care industry contributes substantially to the Gross Domestic Product (GDP) and employment rates. According to Statistics South Africa (2016), the sales of skin care products increased by 7.8% year on year in February 2016 and were even higher than the sales of cosmetic products. The skin care market in South Africa was valued at approximately US$ 581.7 million in 2017 and is forecasted to reach US$ 839.2 million by 2023 (Market value of the professional skin care market in South Africa, 2019). The skin care industry is also often one of a country's biggest employers (Souza *et al.*, 2014). In South Africa, the retail sector where skin care products are mainly sold, employs more than 16% of the total workforce of the country and the sector is expected to grow, due to the demand for better skin care (Souza *et al*., 2014, Statistics South Africa, 2016). The role players in the skin care industry in South Africa is expected to benefit from the growing global "grooming" trend which improves sales in numerous product areas (Cosmetic Europe, 2016; Euromonitor International, 2017).

Due to various reasons, the economic contribution of the skin care industry is particularly evident in developing countries. Improved technology and education, advancement in science and positive economic growth have provided consumers globally with opportunities to improve their standard of living (Koshy & Manohar, 2017; Nye, 2019). According to Khuong and Duyen (2016), people want to look beautiful, healthy and good looking. As consumers gain purchasing power, they are becoming more conscious of hygiene and

beauty which in turn is positively affecting the rapid growth in sales of skin care products (Loboda & Lopaciuk, 2013). The skin care market globally has emerged stronger due to the increasing demand of consumers, especially for the younger consumers (Khraim, 2010). The global skin care industry also continues to welcome men into the consumer base for skin care products which has strengthened growth in this industry (Khraim, 2010; Khuong & Duyen, 2016). Within the skincare industry a niche sector such as men's grooming is gaining market share, which ensures that the skin care industry is dynamic and vital to the worldwide economy.

The ever-changing skin care industry is highly competitive and changing consumer preferences as well as prevalent trends in the industry pose challenges for role players. Sales growth in the skin care industry could slow down because of on-going price-sensitivity and strong price competition among industry role players (Euromonitor International, 2017). Businesses must understand the buying behaviour of consumers to ensure the role players' survival in a competitive industry (Kotler & Armstrong, 2016). If tangible and intangible product variables are considered in the production and marketing of skin care products, it may lead to consumers' perceptions of skin care products being enhanced, a positive change in consumers' buying behaviour and ultimately improvements in role players' performance (Hill, *et al.* 2012). In addition, the role of demographic factors in influencing skin care consumers' buying behaviour is yet to be explored, although gender and age are among factors mentioned as being relevant in the skin care industry. Knowing which factors influence consumers' buying behaviour in this volatile business environment is important to skin care businesses' success (Anjana, 2018). This study will contribute to the knowledge of marketing, specifically consumer buying behaviour and how it is influenced by demographic factors in the South African skin care industry.

Despite changes in developing countries, most previous studies were conducted in India, Taiwan, United States of America, Brazil and Japan (Anjana, 2018; Euromonitor International, 2017; Souza *et al.*, 2014). With regard to demographic factors, previous research in the skin care industry focused on gender differences in consumer behaviour for online financial transactions of skin care products, consumption of skin lighteners and the skin care cluster (Huang *et al.,* 2013; Liu, *et al.,* 2013). Limited research exists on tangible and intangible product variables as well as consumer buying behaviour in the skin care industry (Souza *et al.*, 2014), especially as to how these variables relate to consumers' demographic factors in developing economies. Therefore, the problem investigated is formulated as follows: Which demographic variables influence consumers' perceptions regarding product variables and consumer buying behaviour in the skin care industry in South Africa?

Research Objectives
The primary objective of this study was to identify how demographic factors influence consumers' perceptions regarding product variables (tangible and intangible) and consumer buying behaviour in the South African skin care industry. Identifying relationships relevant to consumers' demographic factors creates opportunities to positively influence consumers' buying behaviour toward skin care products, since relevant marketing initiatives could be focused on specific demographic groups to possibly increase sales, profits and ultimately the success of role players in the skin care industry.

2. Literature Review

Skin care products are used to meet skin care needs such as facial make up and adornment (Burlando *et al.,* 2010). Moreover, skin care products are intended to cleanse and beautify consumers and a separate category exists for skin care products that are used for medical purposes, which serves the purpose of diagnosing, curing, mitigating, treating or preventing skin care diseases (Flanagan, 2013). Skin care products are categorized as toners, facial masks, exfoliants, moisturisers and cleansers (Wagoner, 2014). As this study suggests, consumers' buying behaviour with regards to skin care products may be influenced by different factors, including consumers' demographic aspects. The literature review will discuss consumer buying behaviour, product variables and demographic factors, specifically relevant to the skin care industry.

Consumer buying behaviour

Various different definitions of consumer buying behaviour exist. Consumer buying behaviour refers to the behaviour displayed by consumers when searching for, purchasing, using, evaluating and disposing of products and/or services (de Meyer-Heydenrych *et al.,* 2017). According to Anandarajan and Sivagami (2016), consumer buying behaviour is the study of individuals and the methods individuals employ to choose, utilize and buy products. This is affirmed by Cant (2010) and De Mooij (2010), who state that consumer buying behaviour is the way in which individuals, groups and businesses select, purchase, use and dispose of products or services, ideas or experiences in order to satisfy their needs and wants. Cant (2010) alludes that consumer buying behaviour is shaped by what consumers buy, where consumers buy, how consumer buy and how often consumers buy. Furthermore, consumer buying behaviour refers to the manner in which consumers make decisions on how to spend money, time and effort on products (Kengthon, 2011). Consumer buying considers the patterns of aggregate buying which include pre-purchase (growing awareness of a need or want, and a search for and evaluation of information about the products and brands that might satisfy it) and post-purchase activities (evaluation of the purchased item in use and the reduction of any anxiety which accompanies the purchase of expensive and infrequently-bought items) (Kumar *et al.,* 2014). It can thus be surmised that consumer buying behaviour refers to all activities undertaken by a consumer to make the final purchasing decision. Consumers are rational beings who progress through five different steps when purchasing a product (Kotler & Keller, 2012). These steps are categorized in the five-stage model of consumer buying behaviour namely problem recognition, information search, the evaluation of alternatives, making the buying decision and post-buying behaviour (Kotler & Armstrong, 2016).

Understanding consumer behaviour contributes to the continued success of businesses (Kumar *et al.*, 2014). Consumer buying behaviour is important to businesses for various reasons and it may assist the business not only to understand what consumers purchase, but also aid in understanding why they purchase the products or services (de Meyer-Heydenrych *et al.,* 2017). It may assist businesses in understanding the consumption of products and the reasons behind disposing of products or services and assist in understanding the post-purchase behaviour of consumers (Solomon *et al.,* 2012). It furthermore assists businesses in attracting and retaining consumers (De Mooij, 2010). Studying business buying behaviour assists in increasing the knowledge of sales people and aid the effective marketing of the product by sales people to deliver the right product to the right consumer (de Meyer-Heydenrych *et al.,* 2017). In the skin care industry, understanding consumer buying behaviour may also assist businesses in understanding why consumers switch to competitor products (Raghavan, 2010). When a business has the knowledge and information that drives consumers to switch products, the business can devise strategies that lower the risk of losing consumers to competitor products (Anandarajan & Sivagami, 2016).

Various authors allude that specific product tangible and product intangible variables could influence consumers' buying decisions (Baines & Fill, 2015; Kotler & Armstrong, 2016; Lamb, *et al.,* 2015). The tangible variables are functional, and include product attributes, packaging and labelling (Kotler & Armstrong, 2016). Intangible product variables are related to the emotional feelings felt by consumers when using skin care products (Lamb *et al.,* 2015), and include pricing and branding. Kotler and Keller (2012) argue that the consumer first realize aspects linked to a product; thereafter these product variables may influence the consumer's buying behaviour. According to Anandarajan and Sivagami (2016), consumer behaviour can furthermore be influenced by several demographic factors. Demographic factors refer to the statistics of human populations and include population size, density, location, age, gender, ethnicity, occupation educational level, marital status, language and religion (de Meyer-Heydenrych *et al.,* 2017). The influence of these demographic factors on consumer buying behaviour may differ from individual to individual based on the observed gender, age, average income, ethnicity and occupation (Kotler & Keller, 2012).

Product tangible variables

Tangible product variables are defined as directly and indirectly observable physical characteristics of a product and can include product characteristics such as the product's material composition, size, colour, volume, taste, smell or weight (Baines & Fill, 2015; Kotler & Keller, 2012). According to Kotler and Armstrong (2016), product tangible variables can include product attributes as well as aspects such as packaging and labelling. Product attributes are defined as the physical or formal properties of a product (Diehl, *et al,* 2016).

According to Kotler and Armstrong (2016), product attributes define the benefits that the product will offer. These benefits are communicated and delivered by the product attributes such as quality, features, and style and design (Cant, 2010). Aspects such as the size, colour, functionality and components of products are product attributes in the skin care industry that affect the product's appeal or acceptance in the market (Cosgrove, 2013; Huang *et al.*, 2013). It is thus important for a business to realize that product attributes are important to consumers as it may influence consumer's buying behaviour (Bitzios, *et al.,* 2011)

Packaging is a critical tool that helps to visualize and verbalize what a business' product stands for (Laforet, 2010). Packaging holds the contents of products together and protects products as the products move through the channels of distribution (Lamb *et al.,* 2015). Packaging in the skin care industry is an element of marketing communication between the consumer and the business and is the first aspect that a consumer sees (Thomas, 2011). Quality judgements are largely influenced by product characteristics reflected by packaging; and these play an important role in the formation of product preferences (Laforet, 2010). Appropriate information on packaging has a strong impact on the consumers' buying decision as this information reduces uncertainty and creates product credibility (Laforet, 2010). Therefore, the package's overall features may affect the buying behaviour of consumers (Kotler & Armstrong: 2016).

According to Kotler and Armstrong (2016), labelling is either a simple tag attached to products or complex graphics that are part of the package. Labelling involves the displaying of information about a product on its container, packaging or the product itself (Ahmad, *et al.,* 2012). In the skin care industry labelling is important as it is a tool used to convey information regarding the product (Cosmetic Europe, 2016). Skin care products must include information that explains what the product is for, how to use the product and how to obtain the best results, when the product was manufactured as well as its ingredients and expiry date. Moreover, labelling should not mislead or deceive consumers and without proper labelling, a product will not be permitted onto the market (Cosmetic Europe, 2016). Proper labelling that does not mislead consumers, may result in consumers repeating the purchasing of the same product, thereby creating a positive image of the product (Baines & Fill, 2015). Therefore, if correct labelling is used on skin care products, the labels may influence the buying behaviour of skin care consumers positively since a label identifies and markets the business and its products.

Product intangible variables
Intangible product variables are unobservable characteristics which a physical product possesses (Kotler & Keller, 2012; Kotler & Armstrong, 2016). The literature to follow recognizes pricing and branding as intangible product variables. According to Laforet (2010) consumers are willing to pay more for products that meet their skin care needs, and therefore pricing is an important intangible variable relevant to the skin care industry. A price of a product refers to the amount of money expected or required in payment of something (Baines & Fill, 2014). Price is what is sacrificed in an exchange to acquire a product (Lamb *et al.,* 2015). Consumers are price sensitive in the skin care industry (Khraim, 2013). Consumers use price as an important indicator of product quality or benefits, which in turn influence their buying behaviour (Kotler & Armstrong, 2016). Literature confirms product pricing as a variable that consumers consider during purchasing (Khraim, 2012). It was also mentioned in previous literature that businesses should do price research in advance of releasing products so as to make sure they set prices that consumers are comfortable with and willing to pay (Kotler & Keller, 2012). It is therefore important for the business to realize that pricing is important for consumers as it may influence consumer buying behaviour (Salamin & Hassan, 2016).

Another unobservable characteristic consumers consider when they evaluate and purchase skin care products are branding (Baines & Fill 2014; Hsu, 2017; Lamb *et al.,* 2015). Branding is the marketing practice of creating a name, symbol or design that identifies and differentiates a product from other products (Laforet, 2010). Kotler and Armstrong (2016), state that branding is a process involved in creating a unique name and image for a product in the consumer's mind, mainly through advertising campaigns. Moreover, branding aims to establish a significant and differentiated presence for a business in the market that attracts and retains loyal consumers (Kotler & Armstrong, 2016). In the skin care industry, brand names or symbols create a product identity in the minds of consumers (Laforet, 2010). The consideration of brand naming of skin care products can stimulate consumption of the product (Burlando *et al,* 2010). Skin care products may have

branding elements, for example a logo, which help consumers in memorizing a business' product. This will increase skin care industry sales, the maximization of market share and assist in building positive brand equity (Sahney, 2016). Therefore, a well branded product may positively influence the buying behaviour of consumers (Lamb *et al.*, 2015).

Demographic factors
Demographic factors are uncontrollable factors in the business environment, but have the ability to influence businesses' success. For instance if L'Oreal had failed to acknowledge that females have different skincare preferences to males, a major opportunity to offer specialized female products would have been missed. Recognition of this variation in consumer preferences has contributed to a lucrative skin care market of which the global value was estimated at US$ 121 billion in 2016 (de Meyer-Heydenrych *et al.,* 2017; Size of the global skin market, 2019).

Gender: Theodoridis and Chatzipanagiotou (2009) note gender as a significant influencer in the construct of an individual's personal identity. Males and females exhibit different buying behavioural patterns. Females tend to be more environmentally conscious in their purchases (In & Ahmad, 2018). Female purchases are often driven by emotional and relationship reasons, whereas male purchases are driven by a need for functionality. Saleh, Alothman and Alhoshan (2013) note that women respond more favourably to promotional material and that women are often the primary shoppers for their family. The global skin care industry continues to welcome men into the consumer base for skin care products, and this movement has strengthened growth in this industry (Khraim, 2010). According to Khuong and Duyen (2016), one in four men globally uses skin care products such as cleansers, anti-aging treatments and moisturisers. A significant growth in the number of women in the workforce in South Africa during the last decade (45.5% of the 2018 work force), has boosted the demand for skin care products in the country (Mordor Intelligence, 2019). Gender is thus a demographic factor possibly affecting consumer buying behaviour in the skin care industry.

Age: Age is an important demographic factor that affects consumer buying behaviour (Eslar, 2012; Raghavan, 2010). As consumers grow older, their needs change, which influence their buying decisions. Age moreover influences consumers' lifestyles and concomitantly their needs and personal values (Kotler & Armstrong, 2016). Kotler and Keller (2012) allude that younger consumers spend more on lifestyle needs such as fun, movies and fashion. Elderly consumers remain indoors and their health related expenses may rise. Furthermore, age influence impulse buying and consumers' response to promotions (Sharma & Antil, 2013). Skin care needs differ with age and key age-related trends within the South African skin-care industry include the use of sunscreen protection due to increased outdoor activities and anti-aging skin products. Younger men are furthermore becoming more participative in the facial skin care industry (Euromonitor, 2019). Age is thus a demographic factor possibly affecting consumer buying behaviour in the skin care industry.

Income levels: Consumers with different income levels exhibit different buying patterns (Kotler & Armstrong, 2016). The level of income determines what kind of products consumers regularly purchase. Consumers with higher disposable income will spend more on luxury or lifestyle products (Cant, 2010). A consumer in the middle class might base his/or her buying decisions on utility. The style, design and special features of a product might be more important for high income earners (Euromonitor, 2019), which suggests a relationship between perceptions of product attributes and income levels. Facial care represents the largest category of skin care purchases within South Africa, with products such as moisturisers and anti-agers constituting an important part of many consumers' skin care regimens. However, for low-income consumers, general purpose body care products often act as a substitute for facial care (Euromonitor, 2019). Private label and economy skin care brands perform well in the restrictive economic climate in South Africa as they are more affordable and therefore appeal to price-sensitive consumers. Moreover, South African consumers are increasingly engaging in brand switching behaviour, as they look for products that offer quality at competitive prices that suit their income levels (Euromonitor, 2019). Therefore, the income level of a consumer is a demographic factor possibly affecting consumer buying behaviour in the skin care industry.

Ethnicity: Ethnicity exerts a broad influence on consumer buying behaviour (Kotler & Armstrong, 2016). Ethnicity or culture refers to a set of shared values, ideas, attitudes and other meaningful symbols that allow

consumers to communicate, interpret and evaluate various aspects and situations, as members of society (Eslar, 2012). Kotler and Keller (2012) allude that culture is the fundamental determination of a consumer's wants and behaviour, and consumer behaviour is learned (Kumar *et al.,* 2014). Hofstede (1991) alludes that different cultures value different objects and standards of beauty. For example, growing up in a society, a consumer learns basic values and perceptions from his/her family and other important institutions influencing his/her behaviour. Businesses must closely attend to values and different ethnic groups so as to understand how to best market their existing products and find opportunities for new products (Kotler & Keller, 2012).

South Africa has great cultural diversity, combining different ethnic groups, including hybrid mixtures of different cultures which greatly impact how local and international products skin care products are received (Euromonitor, 2019; Mordor Intelligence, 2019). The popular perception in South Africa is that international brands of skin care are of better quality than local products (Euromonitor, 2019). Growth in the popularity of international brands is being driven by aspirational ethnic groups who want to be associated with well-known international brands, which serve as a status symbol for the consumer (SAPSILR, 2018). However there is also a shift by different ethnic groups towards buying more niche locally made products, as the African climate and how it affects consumers' skin is different, and as such comes with different skin requirements (Euromonitor, 2019). The increase of black males in South Africa that regard skincare as important will furthermore shape and influence the skin care market in the country (Euromonitor, 2019). Ethnicity is thus a demographic factor possibly affecting consumer buying behaviour in the skin care industry

Occupation: Knowledge is recognized in consumer research as a characteristic that influences all phases in the decision process as it affects how consumers gather and organize information, how much information is used in decision making and how consumers evaluate products and services. The degree of knowledge a person has is often in line with his/her occupational status. The occupation of a consumer affects the products and services a consumer buys (Laforet, 2010). Cant (2010) alludes that products of businesses should appeal to different occupational groups, as the buying decisions of consumers are shaped accordingly. Respondents in a high-profile career, could for example, be more status orientated and use their purchases as a means of enforcing an aspiration. Solomon *et al.* (2012) also corroborate this by stating that product choice and buying patterns are influenced by the type of employment an individual holds. Literature confirms that the social status of consumers, often linked to their occupation, influences their buying behaviour as consumers seek status-related product variables that satisfy their skin care needs (Kotler & Armstrong, 2016). Consumers are inclined to purchase products and services that advocate their profession and role in the society. This means that consumers with high-income and/or high-status occupations will have different buying behaviours than their lower- income or occupational status counterparts (Siqebengu, 2018).

3. Research Methodology

The primary objective of this study was to identify how demographic factors influence consumers' perceptions regarding product variables (tangible and intangible) and consumer buying behaviour in the South African skin care industry. Secondary research was conducted on consumer buying behaviour and product variables relevant to skin care products, and the possible associations between demographic factors and the selected product variables. A quantitative research design was adopted for this exploratory study to test the relationships between demographic factors and the following product variables, Product attributes, Product packaging, Product labelling, Product pricing, Product branding, as well as Consumer buying behaviour. The research methodology is appropriate since hypotheses were statistically tested by gathering responses from a large sample through a structured questionnaire (Struwig & Stead, 2013), during the study's empirical investigation.

The study's target population was all South African skin care consumers. However, due to the study's geographic basis, cost and time constraints, the sample was narrowed to consumers residing in the Nelson Mandela Metropole. The researchers assumed that due to the nationwide availability and sales of skin care products throughout South Africa, consumers in one region should have fairly similar views in other South African regions. The suggestions by Swanson and Holton (2005) as well as Sprenkle and Piercy (2005)

assisted in deciding on the minimum number of respondents for this study. This study has six variables and a minimum of five questionnaire items per variable was required. A minimum of five respondents per item was also required, and the multiplication of the six variables, with the five items per variable and five respondents per item, indicated a minimum of 150 respondents required. All ethical aspects pertaining to the research, including confidentiality, anonymity, withdraw options, data use and consent, were considered. The questionnaire's cover letter explained the research to potential respondents. Academic experts in the field of marketing management were also asked to scrutinize the questionnaire prior to the main study to ensure face validity. No sampling frame was available since no list of all skin care consumers in the geographical area was available. Therefore, non-probability sampling was used to draw the sample. Convenience sampling (Struwig & Stead, 2013) was used to invite potential respondents at recreational spaces.

The three-part questionnaire was in English and self-administered by consumers. Section A focused on gathering biographical and demographical data related to respondents' gender, age, occupation and skin care consumption patterns. Due to the sensitive nature of income levels, respondents were not asked to reveal these levels. However, to encapsulate the effect of income levels, details about respondents' occupations and their average spending on skin care products were investigated. Section B consisted of 40 statements related to the product variables: product attributes, packaging, labelling, pricing and branding. Section C posed nine statements to gather data on the respondents' buying behaviour. Sections B and C made use of a five-point Likert-type scale (Burns & Burns, 2008). The Likert-type scale options ranged from "strongly disagree" to "strongly agree" on a scale of 1 to 5. The self-developed items were based on the operationalisation of the variables, as conceptualized from the literature overview.

Microsoft Excel was used for electronic data collection and data cleaning. Thereafter, Statistica 13 was used for the statistical data analysis. Descriptive statistics such as means, standard deviations and frequencies were used to summarize, organize and simplify the data relating to the respondents' demographic information (Gravetter & Wallnau, 2012). Secondly, to identify relationships between demographic data and the other selected variables (to test the hypotheses), a T-test and Analysis of Variance (ANOVA) tests were conducted. A T-test was undertaken to identify and observe whether two mean values of respondents differ (Zikmund, *et al.,* 2013). ANOVA is a statistical analysis that examines significant variances among two or more means of different respondent groups (Cooper & Schindler, 2011). For the purpose of this study, a T-test and ANOVA tests were undertaken to identify mean differences of various respondent groups' demographical data and their perceptions on the specific product variables as well as Consumer buying behaviour. For example, an ANOVA test was used to identify whether respondents from different age groups have different perceptions of skin care products' tangible and intangible aspects. Post-hoc Scheffe tests were conducted to identify significant differences in the mean scores of different categories of respondents (Whitley & Kite, 2013).

4. Empirical Results

Descriptive statistics on demographic data
A total of 220 usable questionnaires were collected and analyzed. The majority of the respondents were female (66.8%), with 33.2% of the respondents being male. Most respondents were aged between 18 and 24 years (29.1%), and younger than 34 years (27.3%). With regard to ethnicity, most of the respondents were Black (45.0%), followed by White (30.9%), Coloured (16.4%) and Asian (5.9%) respondents. Many respondents were full-time employees (46.8%), and self-employed (16.8%), followed by students (15.1%). The majority of the respondents have been using skin care products between 0 and 5 years (35%), followed by respondents who have been using skin care products between 6 and 10 years (29%). Respondents used skin care products for various reasons and 75.5% stated that they use moisturisers, 61.4% use cleansers, 57.7% use other skin care products, 35.5% use anti-aging products, 34.5% use toners, 28.2% use exfoliants and 23.6% use sun protection products. Regarding average spending patterns linked to skin care products, the majority of the respondents fitted into two groups: those spending less than R199 (41.4%) per month and those spending between R200 and R399 (33.6%) per month on skin care products, respectively.

A previous study (Mabuyana, 2019) confirmed the validity and reliability of this study's measuring instrument. In addition, the previous study (Mabuyana, 2019) confirmed that each of the product variables and Consumer buying behaviour are valid variables influencing the buying behaviour of consumers in the skin care industry in South Africa. Subsequently, these variables were used to conduct the T-test and ANOVA tests for this current study, to identify differences in perceptions based on demographic factors in relation to these selected variables.

Results of the T-test

A T-test was conducted to determine how male and female respondents have different perceptions regarding the product variables and Consumer buying behaviour. It can be surmised from literature and previous studies conducted, that the buying behaviours and patterns of males and females might be different.

The following hypotheses were formulated:

H[1.1]: Different genders have significantly different perceptions regarding product variables relevant to the skin care industry.

H[1.2]: Different genders have significantly different consumer buying behaviour in the skin care industry.

The results of the T-test on *Gender* are displayed in Table 1.

Table 1: T-test results – Gender

Variables	t-value	Sig.(p)
Product attributes	-2.425	0.132
Product packaging	-1.623	0.707
Product labelling	-3.373	0.415
Product pricing	-1.184	0.223
Product branding	-0.725	0.650
Consumer buying behaviour	-3.379	0.803

($*p<0.05$; $**p<0.01$; $***p<0.001$)

Source: Researchers' own construction from survey results.

From the T-test results (Table 1), it is evident that there are no significant differences in responses based on the *Gender* of respondents. Therefore, whether the respondents were male or female, exerted no significant influence on their perceptions regarding product variables and *Consumer buying behaviour*. Consequently, the two relevant hypotheses (H[1.1] and H[1.2]) as stated above are rejected.

Results of the Analysis of Variance (ANOVA) tests

ANOVAs were undertaken to identify mean differences of various respondent groups' demographical data and their perceptions on the specific product variables as well as Consumer buying behaviour. Where applicable, to establish significant differences between the individual mean scores of different categories of respondents, post hoc Scheffe tests were conducted and practical significance was assessed by calculating Cohen's d values.

The influence of respondents' age on their perceptions regarding the product variables and Consumer buying behaviour were to be determined. Literature confirmed that the perception exists that age groups might influence the buying behaviour of consumers, as different age groups might have different perceptions and preferences towards products.

H[2.1]: Different age groups have significantly different perceptions regarding product variables relevant to the skin care industry.

H[2.2]: Different age groups have significantly different consumer buying behaviour in the skin care industry.

Table 2 displays the ANOVA results for the *Age* demographic factor.

Table 2: ANOVA results – Age

Variables	F-value	Sig.(p)
Product attributes	1.103	0.360
Product packaging	1.461	0.204
Product labelling	2.005	0.079
Product pricing	2.099	0.067
Product branding	**2.793**	**0.018***
Consumer buying behaviour	**2.289**	**0.047***

($*p<0.05$; $**p<0.01$; $***p<0.001$)
Source: Researchers' own construction from survey results.

Table 2 portrays the results of the ANOVA, showing significant relationships between the demographic factor *Age* and the variables *Product branding* ($p<0.05$) and *Consumer buying behaviour* ($p<0.05$). It is evident that H$^{2.1}$ is accepted, however, only for the intangible product variable *Product branding*, and H$^{2.2}$ is also accepted. However, the post-hoc Scheffé test revealed no significant differences between the different categories of respondents regarding the *Age* of the respondents and the variables *Product branding* and *Consumer buying behaviour*.

An ANOVA test was also conducted to assess the influence of the selected demographic factor *Ethnicity* on the respondents' perceptions regarding the product variables and Consumer buying behaviour. As stated in literature, ethnic groups differ due to their cultural background, and their preferences towards products may be affected by different product variables. The following hypotheses were formulated:
H$^{3.1}$: Different ethnic groups have significantly different perceptions regarding product variables relevant to the skin care industry.
H$^{3.2}$: Different ethnic groups have significantly different consumer buying behaviour in the skin care industry.
Table 3 depicts the ANOVA results for the *Ethnicity* demographic factor.

Table 3: ANOVA results – Ethnicity

Variables	F-value	Sig.(p)
Product attributes	0.846	0.498
Product packaging	2.084	0.084
Product labelling	**3.333**	**0.011***
Product pricing	1.223	0.302
Product branding	**5.302**	**0.000***
Consumer buying behaviour	**3.167**	**0.01***

($*p<0.05$; $**p<0.01$; $***p<0.001$)
Source: Researchers' own construction from survey results.

For the demographic factor *Ethnicity*, the ANOVA results (see Table 3) displayed significant relationships with the variables *Product labelling* ($p<0.05$), *Product branding* ($p<0.001$) and *Consumer buying behaviour* ($p<0.05$). This reveals that H$^{3.1}$ is accepted, however, only for the tangible product variable, *Product labelling* and the intangible product variable, *Product branding*, and H$^{3.2}$ is also accepted. Post-hoc tests only revealed significant mean differences with regard to *Ethnicity* and *Product labelling* as well as *Product branding*.

The post-hoc Scheffé test revealed a significant difference regarding the *Ethnicity* of the respondents and their perceptions regarding the tangible product variable *Product labelling*. Black respondents ($\dot{x} = 4.065$) scored significantly higher mean scores than White respondents ($\dot{x} = 3.750$). Therefore, Black respondents are more likely to be influenced by *Product labelling* when purchasing skin care products than White respondents. A Cohen's d value of 0.476 shows that the difference in the mean scores is of moderate practical significance. Furthermore, the post-hoc Scheffé test revealed a significant difference in responses for the intangible product variable *Product branding*, due to the *Ethnicity* of the respondents. Coloured respondents ($\dot{x} = 3.548$) scored significantly higher mean scores than Asian respondents ($\dot{x} = 2.868$). The difference in mean scores indicates that Coloured respondents are more likely to be influenced by *Product branding* when purchasing

skin care products than Asian respondents. However, the Cohen's d value of 0.104 shows that the difference in the mean scores is of small practical significance.

Another ANOVA test was performed to assess the influence of the selected demographic factor *Occupation* on the respondents' perceptions regarding the product variables and Consumer buying behaviour. As explained by literature, consumers' occupation may determine their income levels and define their social statuses, and therefore may affect the type of products the consumers buy. The following hypotheses were formulated:

H[4.1]: Respondents with different occupational statuses have significantly different perceptions regarding product variables relevant to the skin care industry.

H[4.2]: Respondents with different occupations statuses have significantly different consumer buying behaviour in the skin care industry.

Table 4 shows the ANOVA results for the *Occupation* demographic factor.

Table 4: ANOVA results – Occupation

Variables	F-value	Sig.(p)
Product attributes	2.566	0.028*
Product packaging	3.097	0.010*
Product labelling	2.800	0.018*
Product pricing	1.156	0.332
Product branding	4.416	0.001***
Consumer buying behaviour	3.707	0.003**

(*$p<0.05$; **$p<0.01$; ***$p<0.001$)
Source: Researchers' own construction from survey results.

Table 4 portrays the results of the ANOVA, showing significant relationships between the respondents' demographic factor *Occupation* and the variables *Product attributes* ($p<0.05$), *Product packaging* ($p<0.05$), *Product labelling* ($p<0.05$), *Product branding* ($p<0.001$) and *Consumer buying behaviour* ($p<0.01$). This reveals that H[4.1] is accepted, however, only for the tangible product variables, *Product attributes*, *Product packaging* and *Product labelling* and the intangible product variable, *Product branding*, and H[4.2] is also accepted. However, the post-hoc Scheffé test only revealed significant differences between the different categories of respondents regarding the *Occupation* of the respondents and the variables *Product packaging*, *Product branding* and *Consumer buying behaviour.*

With regards to *Product packaging*, the post-hoc Scheffé test indicated that respondents who are full-time employed (ẋ = 3.227) scored significantly higher mean scores than respondents that are self-employed (ẋ = 2.689). This difference indicated that respondents who are full-time employed are more likely to consider *Product packaging* when purchasing skin care products than self-employed respondents. Furthermore, considering *Product branding*, the post-hoc Scheffé test indicated that respondents who are part-time employed (ẋ = 3.505) scored significantly higher mean scores than respondents that are self-employed (ẋ = 2.904). This difference indicates that respondents who are part-time employed are more likely to consider *Product branding* when purchasing skin care products than self-employed respondents. Lastly, the post-hoc Scheffé test detected a significant difference in terms of the *Occupation* of the respondents and the dependent variable *Consumer buying behaviour*. Respondents who are full-time employed (ẋ = 3.789) scored significantly higher mean scores than respondents who are self-employed (ẋ = 3.311). The difference in mean scores indicates that full-time employees' *Consumer buying behaviour* is more likely to be positively influenced than that of self-employed.

An ANOVA test was administered to assess the influence of the selected demographic factor *Average spending* on respondents' perceptions regarding the product variables and Consumer buying behaviour. Literature and previous empirical studies affirmed the general perception that consumers' spending patterns may differ due to respondents' different occupations, and this might influence their buying behaviour.
The following hypotheses were formulated:

H[5.1]: Respondents with different average spending levels have significantly different perceptions regarding product variables relevant to the skin care industry.

H[5.2]: Respondents with different average spending levels have significantly different consumer buying behaviour in the skin care industry.

Table 5 portrays the ANOVA results for the *Average spending* demographic factor.

Table 5: ANOVA results – Average spending

Variables	F-value	Sig.(p)
Product attributes	1.350	0.244
Product packaging	0.555	0.735
Product labelling	0.584	0.712
Product pricing	1.942	0.089
Product branding	0.724	0.606
Consumer buying behaviour	**2.736**	**0.020***

(*$p<0.05$; **$p<0.01$; ***$p<0.001$)
Source: Researchers' own construction from survey results.

Table 5 presents the results of the ANOVA test, showing a significant relationship between the demographic factor *Average spending* and *Consumer buying behaviour* ($p<0.05$). This indicates that H[5.1] is rejected and H[5.2] is accepted. The post-hoc Scheffé test also revealed significant differences between the different categories of respondents based on their *Average spending* and *Consumer buying behaviour*. Specifically, post hoc tests revealed that respondents who spend between R400 – R599 (ẋ = 3.969) scored significantly higher mean scores than respondents who spends between R0 – R199 (ẋ = 3.542). The post-hoc Scheffé test revealed that the *Consumer buying behaviour* of respondents with an average spending of between R400 – R599 per month on skin care products is more likely to be positively influenced than that of respondents with an average spending on skin care products between R0 – R199. This indicates that respondents who spend more on skin care products on a monthly basis may be more loyal to certain skin care products (improved, positive *Consumer buying behaviour* levels).

5. Discussion and Managerial Implications

The primary objective of this study was to identify how demographic factors influence consumers' perceptions regarding product variables (tangible and intangible) and consumer buying behaviour in the South African skin care industry. The empirical investigation indicated that selective demographic factors influence consumers' perceptions regarding selective product variables. The study also proved that, except for gender, all other demographic factors tested influence consumer buying behaviour in the skin care industry. This study posed as a starting point for research on skin care products in developing economies – countries that are economically growing- thus consumers in these countries, with higher levels of disposable income, spend more on products that are not life-essential products such as skin care products.

From the literature review it is evident that similar results were found in previous studies relating to product variables, consumer buying behaviour and demographic factors in other contexts. In this study, firstly, a significant difference was found between Black and White respondents with regard to *Product labelling*, while a significant difference with regard to *Product branding* was found between Coloured and Asian respondents. It can be assumed, based on the study results, that Black and Coloured respondents consider *Product labelling* and *Product branding* respectively as more important variables that positively influence their buying behaviour than their other ethnicity counterparts. Secondly, from the study results, it can be assumed that full-time employees and part-time-employees will consider *Product packaging* and *Product branding* respectively more so than other employees, during purchasing of skin care products; thus, these respondents' buying behaviour is influenced by these variables. Thirdly, a significant difference was found between respondents who are full-time employees and self-employed with regard to *Consumer buying behaviour*. Finally, a significant difference was found between respondents whose *Average spending* on skin care products is between R400 – R599 and R0 – R199. It can be assumed, based on the study results, that the

larger the amounts consumers spend on skin care products, the more loyal the consumers become towards role players' skin care products as the consumers' buying behaviour is influenced positively.

Table 6 summarizes the acceptance and rejection of the study's hypotheses.

Table 6: Results of The Testing Of The Hypotheses

Hypothesis	Result
H[1.1]: Different genders have significantly different perceptions regarding product variables relevant to the skin care industry.	Reject
H[1.2]: Different genders have significantly different consumer buying behaviour in the skin care industry.	Reject
H[2.1]: Different age groups have significantly different perceptions regarding product variables relevant to the skin care industry.	Accept for *Product branding*
H[2.2]: Different age groups have significantly different consumer buying behaviour in the skin care industry.	Accept
H[3.1]: Different ethnic groups have significantly different perceptions regarding product variables relevant to the skin care industry.	Accept for *Product labelling* and *Product branding*
H[3.2]: Different ethnic groups have significantly different consumer buying behaviour in the skin care industry.	Accept
H[4.1]: Respondents with different occupational statuses have significantly different perceptions regarding product variables relevant to the skin care industry.	Accept for *Product attributes*, *Product packaging*, *Product labelling* and *Product branding*
H[4.2]: Respondents with different occupations statuses have significantly different consumer buying behaviour in the skin care industry.	Accept
H[5.1]: Respondents with different average spending levels have significantly different perceptions regarding product variables relevant to the skin care industry.	Reject
H[5.2]: Respondents with different average spending levels have significantly different consumer buying behaviour in the skin care industry.	Accept

Source: Researchers' own construction.

It is important to note that *Gender* and *Average spending* are the two demographic factors with no significant influence on skin care consumers' perceptions on product variables. In addition, of these two demographic variables, only *Average spending* significantly influences skin care *Consumers' buying behaviour*. It is therefore notable that the demographic factors *Age*, *Ethnicity* and *Occupation* significantly influence selected product variables, and all three of these demographic factors significantly influence skin care *Consumers' buying behaviour* in the South African context. Specifically, role players in the skin care industry should give attention to *Product branding*, *Product labelling* and *Product packaging*. Based on the results of this study, specific practical guidelines relevant to the South African skin care context, are provided:

- Labelling and branding are more important to Black and Coloured consumers respectively. Therefore, through consumer research, the popular skin care products purchased by these consumer groups should be identified and it should be ensured that labels and branding are inspiring and commanding their attention. For example, ensure that the colors used on labels and in branding are increasing awareness of the products among these consumers and motivating them to purchase the products.
- Packaging and branding are more important to full-time and part-time employed consumers respectively. Stronger packaging, even slightly more expensive, to better protect and market the skin care products could be used for products that appeal to, and are often purchased by, full-time employed consumers (possibly having higher income levels). To encourage purchases by part-time employed consumers, the relevant products should be well-branded to ensure awareness and appeal.

- Since consumer buying behaviour of full-time employed consumers are more positive, full-time employed consumers should be incentivized to purchase even more skin care products. For example, discount vouchers, two-for-the-price-of-one offers and free samples could be given to consumers in specific income level brackets (identifiable from consumer research).
- Set prices that are reasonable, since more positive consumer buying behaviour is evident from those spending between R400 – R599 per month on skin care products. Again, through consumer research and sales records (for example by using data from retailers' loyalty programmes), those spending more than R400 per month on skin care products could be incentivized with further discounts.

Limitations and Future Research

Although the study was exploratory and provided practical guidelines to skin care industry role players, the sample size consisted of 220 skin care consumers in the Nelson Mandela Metropole. For future research, the sample could be expanded and include respondents from other South African metropoles. However, despite the study's sample and focus area, it could be assumed that due to the nationwide availability and sales of similar skin care products throughout South Africa, consumers in one region should have fairly similar views in other South African regions. Future research could identify the influence of demographic factors on other variables, and not only selected product variables, which may also influence consumers' buying behaviour in the skin care industry. These variables may include cultural, social, personal and psychological factors relevant to consumers' buying behaviour (Kotler & Armstrong, 2016; Mihart, 2012; Wood & Solomon, 2014). Despite the number of limitations, the execution and results of this study make a significant contribution to the body of knowledge on the product variables influencing consumers' buying behaviour, specifically in the skin care industry.

Conclusion

The investigation of the influence of demographic factors on consumers' perceptions regarding product variables (tangible and intangible) and consumer buying behaviour in the South African skin care industry clearly indicates that demographic factors influence how consumers decide on and buy products. This means that if role players market their product differently to consumer groups with different demographic factors, the consumers' buying behaviour could be improved. This could mean improved success rates for role players in the skin care industry. The results and guidelines presented by this study attempt to provide role players in the skin care industry with practical means for improved utilization and integration of demographic factors in relating to specific product variables and consumer buying behaviour into their businesses' marketing efforts. This may ultimately ensure that consumers' skin care needs are satisfied as well as lead to more successful and profitable role players within the skin care industry.

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Paper 28

Aaker versus Keller's models: Much a do about branding

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Abstract: Brands are said to be the most valuable assets of businesses. Arguably the most prominent brand management models presented in the extant theory are Aaker's brand equity model and Keller's customer-based brand equity model (renamed to brand resonance pyramid) (Steenkamp, 2016). These models were developed predominantly from a business-to-consumer (B2C) product context. In the 21st century services and the business-to-business (B2B) context are more relevant than ever. Important research questions are therefore: Can these models be used unadapted or should it be adapted to guide brand management for B2B services in general and B2B services brand building within the African context specifically? There is a perceived urgent need for an amended brand management model for B2B services. To answer the research questions raise above, a series of studies have been initiated, which will span a number of years. This paper, however, reports on the theoretical framework for the series of studies, namely which one of Aaker or Keller's models should be chosen and applied or tested for possible adaptation for an African B2B service context? To achieve the objective of the research a comparative theoretical research framework was employed to contrast and compare the two models. Limited research exists that compare Aaker and Keller's models and it is not known whether to use any one of the models, both or a combination as brand management guide. The building blocks of the two models have different labels and the models have different layouts. At first glance Aaker and Keller's models appear to be dissimilar, but are they? The two models are introduced and then the marketing mix is overlaid onto Keller's model because it is through the marketing mix that brand equity is created. A table is presented considering the parity between the two models and this is represented visually by colour coding the models. The findings reported show substantial similarities when the models were compared. Therefore, there is no need to allocate resources to apply both models, rather the brand resonance pyramid is proposed for the application during the next phase of the journey towards an amended African B2B services brand management model.

Keywords*: Brand equity, customer-based brand equity, brand awareness, brand imagery, brand loyalty*

1. Introduction

A comparison of Aaker and Keller's models is not quite Shakespearean, but no less intriguing. An enquiry into the similarities between the brand equity models of Aaker and Keller is timely as an explicit comparison of these models has not been made to determine how different or congruent they are. Are the models fundamentally different or is it a case of much ado about nothing? It is therefore the aim of this article to make a case to show that the models are fundamentally the same with an overlap of most dimensions. When branding models were conceptualized the purpose was to explain and simplify the roles of the various brand-building components and their inter-relatedness. Also, the short-term results of promotional activities (sales turnover, market share etc.) are easy to measure compared to long-term brand-building returns. For this reason, research into building brand equity is important to show how brand-building activities are linked to future brand performance so as to justify spending on brand-building activities (Aaker, 1991). Branding models bring together academic research and even though this means that both perspectives are historical the aim was to elevate branding practice from opinion to objective discussion (Aaker, 1991).

As mentioned, Aaker and Keller's models appear to be dissimilar, but how different are they? Is there an extent of congruence? To answer these questions, the readily available theory concerning the models were studied. Comparing the prominent branding models may aid the decision regarding which model to use to

guide brand building; the one or the other or maybe both in combination. In addition, it is shown how the extended marketing mix overlays with the brand resonance pyramid. This theoretical article starts with various views about the concept of brand equity and positions the two prominent brand equity models in the theory. Then the two models of Aaker and Keller are described, compared and the conclusions presented.

2. Research Methodology

A theoretical (also referred to as basic and/ or fundamental) research framework was used to compare and contrast two seminal brand equity models for this study. Compare-and-contrast articles consider two concepts to be equally important, but with fundamental differences and commonalities (Walk, 1998). The core approach was therefore to focus on literature that related to these two models.

3. Theoretical Background

Concept clarification: brand equity

There seems to be ambiguity regarding the term 'brand equity' (Juntunen *et al.,* 2011). Even though the term brand equity is used most often, in some instances brand equity and brand value are used synonymously. In this regards there are two perspectives when studying brand equity, namely financially-based and strategy-based perspectives. The financially based perspective has as its aim the estimation of the economic market value of the brand for accounting purposes, which is asset valuation for the balance sheet; also known as goodwill (Ambler, 1995). A far as could be established, Ambler's 1995 article is a seminal article, but it does not feature prominently in later articles on the subject.

From early on it was recognized that various approaches exist to calculate the financial value of brand equity, including the price premium generated by the brand; impact of the brand on customer preference; replacement value of the brand; stock price movements; and future earnings. The strategy-based perspective aims to build the importance of brands in respect of consumers' perceptions. This view uses nonfinancial measures of brand equity such as brand awareness and attitude. The strategy- or consumer-based perspective aims to improve the return on marketing investment. Therefore, the financial-based perspective deals with the value of a brand from the organization's point of view (the value of the asset), whereas the strategy based perspective deals with the value of a brand from the consumer's point of view (building the asset itself). Also, brand valuation is so variable, with differing valuations depending on the method used, that some reason that brand equity has no validity (Aaker, 1991; Keller, 1993; Pappu *et al.,* 2005). Ambler's distinction between brand value (quantified financial worth of brand) and brand equity (strength of brand as asset) underlies this article. The analysis that informs this article showed that the distinction between brand value and brand equity is clearer from Keller's (2001) brand resonance pyramid than from Aaker's (1991) brand equity model; perhaps because Ambler's (1995) article was published after Aaker's model, but before Keller's model. The strategic aspects of brand equity are the focus of this article and not financial brand value.

The brand equity concept has different definitions with no generally accepted view about how to conceptualize and measure it. Farquhar (1989) defines brand equity as the "added value with which a brand endows a product" and Srivastava and Shocker (cited in Ambler, 1995) define it as:
a set of associations and behaviours on the part of a brand's customers, channel members and parent corporation that permits the brand to earn greater volume or greater margins than it could without the brand name and that gives a strong, sustainable and differential advantage.

Ambler (1995) himself defines brand equity (the author also calls it goodwill, as mentioned above) as "the sum of brand relationships with those in the market, weighted by their importance that will enhance future profits and cash flow" and brand equity "is a marketing derived asset that has financial value in terms of future profit and cash flow". Also, brand equity is not only consumer driven; rather, "influence agents" outside the distribution channels such as journalists and professional advisors may influence brand equity (Ambler, 1995). A year after Ambler, Aaker (1996) states that "brand equity comprises the assets and liabilities that are associated with the brand, which will either add to or subtract from the utility to the consumer".

According to Aaker, brand equity has five components (or asset and liability groupings), namely (1) brand loyalty; (2) brand name awareness; (3) perceived quality; (4) brand associations in addition to perceived quality; and (5) other proprietary brand assets such as patents, trademarks, channel relationships, and so on. Brand equity is, therefore, represented by a brand name and is a base for competitive advantage and future earnings. Later Keller (2008) suggests that brand equity is "a tool to interpret the potential effects of various brand strategies"; brand equity "consists of the marketing effects uniquely attributable to a brand"; and "the aim of the branding process is to create brand equity". Keller (2008) defines customer-based brand equity as "the differential effect that brand knowledge has on consumer response to marketing of that brand". Keller explains that this response can either be positive or negative. The brand has positive customer-based brand equity if the consumer reacts more favorably to an offering and the marketing message because the brand is known, than if the brand is not known and may, therefore, be less price sensitive and more accepting of extensions. The brand has negative customer-based brand equity if the consumer responds less favorably to the offering when the brand is known, than to an unknown brand. If negative, the brand is regarded as a commodity. This is in agreement with Berry (2000) who also states that brand equity can be positive or negative. Positive brand equity is the "degree of marketing advantage a brand would hold over an unnamed or fictitiously name competitor", and negative brand equity is the "degree of marketing disadvantage linked to a specific brand". Positive brand equity is prominent is the literature, but negative brand equity is a less researched idea; that a brand could have less brand equity than a competing unnamed or fictitious brand and therefore be seen as a commodity. The Oxford Dictionary (2015) defines brand equity as "the commercial value that derives from consumer perception of the brand name of a particular product or service, rather than from the product or service itself".

Brand equity and the relational concept are linked and focus on long-term value creation rather than a short-term transaction orientation or profit maximization. The relational concept treats the brand as "a partner of the consumer with compatible values and personalities" and the brand and consumer have a relationship, which is not dissimilar to that between people (Ambler, 1995). This is supported by Aaker's (1991) view mentioned earlier. The brand equity concept emphasizes the strategic importance of the brand in marketing activities and presents a means of addressing contemporary brand management challenges. The brand resonance pyramid incorporates "theoretical advances and managerial practices" to provide a framework for building, measuring and managing a strong brand. The customer-based brand equity approaches brand equity from the consumer's point of view. The basic argument of the brand resonance pyramid is that a brand's power resides in the consumer's mind. That is, that the power of a brand is built through all experiences with a brand. It is, therefore, crucial for all experiences to add to a positive consumer image and attitude (Keller, 2008). There are different brand equity models; from the simplified models of Bailey and Schechter (1994) and Grossman (1994), which refer to the tangible aspects of the brand only, to the model of Kapferer (1992), which focuses mostly on the emotive aspects of the brand. However, the two most prominent models are Keller's (1993; 2001; 2008) brand resonance pyramid and Aaker's (1991) brand equity model (cited in O'cass & Grace, 2004). These models of Aaker and Keller are discussed next.

Aaker's brand equity model
Aaker's brand equity model (Figure 2) was developed to show how value is created (or lost) through advertising activities that have enhanced (or damaged) brand equity (Aaker, 1991). According to Aaker's brand equity model, brand equity consists of five interrelated brand equity dimensions (assets), with their potential value to either the demand-side consumer or supply-side firm. The dimensions are 'brand loyalty, 'brand awareness', 'perceived quality', 'brand associations' and 'other proprietary brand assets'. According to Aaker (1991), past use experience is a prerequisite to building brand loyalty and brand loyalty can be influenced by brand awareness, perceived quality and brand associations dimensions. Aaker maintains that these asset dimensions do not always explain brand loyalty since brand loyalty can occur independently from these dimensions. Furthermore, loyalty refers to the brand because if loyalty referred to the product or service, and not to the brand, then brand equity would not exist.

Brand awareness, also called brand familiarity, is a consumer perception. Consumers often purchase brands that they are familiar with and translate familiarity into reliability and quality based on past use-experiences. Brand awareness entails a link between the brand and the category, and refers to the awareness pyramid,

which is a hierarchy that ranges from unaware of the brand, brand recognition, and brand recall to top-of-mind awareness. Furthermore, brand awareness is achieved, maintained and improved by being different and memorable, which means that it is necessary to be effective among other competing brands. A slogan should link to the brand name and the offering category and may be effective in raising the level of recall. In addition, a symbol that is closely related to the brand can enhance awareness (Aaker, 1991).

Perceived quality can be defined as a consumer's perception of an offering's quality, as it relates to its intended purpose and alternatives. It often relates to offering performance, but is different to objective quality. Perceived quality directly influences brand loyalty, especially in low involvement purchases. Perceived quality is achieved through commitment to quality, a quality culture, consumer input, measurements/ goals/ standards, which allows for employee initiative to meet consumer expectations. Intrinsic cues (product attributes), as well as extrinsic cues (brand name and associations) can signal quality. Aaker (1991) views brand differentiation as a unique characteristic of contemporary marketing. The author wants to assist the brand strategist to consider different perspectives that differentiate the brand identity based on the "brand as a product", "brand as organization", "brand as person", and "brand as symbol". These perspectives are fundamental to Aaker's brand-equity model.

Brand associations are based on consumer perceptions and attitude and feelings that are linked in the consumer's memory to a brand. Brand associations are links to character, symbol, consumer segment, offering category, feelings, offering attributes, user profiles, and so on, of varying strength depending on past-use experience and the extent of exposure or awareness. Brand image is a set of associations and brand associations may support brand positioning strategy. Brand position is based on relevant or desired and distinct association or image attributes in relation to competitors. Positioning can be perceived from the consumer (how it is) or organization's (how the organization would prefer it to be) point of view. Brand equity is often based on brand associations, which gives meaning to consumers and is represented in brand loyalty (Aaker, 1991).

Other proprietary brand assets include patents, trademarks and channel relationships. These brand assets are most valuable in creating barriers to entry for competitors, and in preserving brand loyalty. The brand assets must be linked to a specific brand. Channel relationship is a result of brand performance and should be based on the individual brand and not the organization as a brand. Also, the assets in this category only contribute to brand equity if the brand cannot easily be replaced by another brand (Aaker, 1991).

These five asset dimensions ultimately provide value to the consumer and organization. The value provided to the consumer includes enhancing interpretation/ processing and storing of information about the offering and brand; confidence in the purchase decision based on brand awareness (familiarity), past-use experience and attributes; and use satisfaction as a result of perceived quality and brand associations. The value that is provided by the asset dimensions to the organization includes enhancing efficiency and effectiveness of marketing programmes to attract new consumers and to reactivate past consumers; brand loyalty that may contest competing brands at the purchase situation; prices/ margins owing to premiums pricing and less reliance on price promotions; brand extensions which, if managed strategically, can enhance profitability; trade leverage as a result of established brand recognition and associations; and competitive advantage because a brand may offer a barrier to entry for competitors based on its key associations, including product attributes, perceived quality and brand awareness (Aaker, 1991). Keller's conceptualization and brand equity model are discussed next so that a comparison between Aaker and Keller's models can be done thereafter.

4. Keller's conceptualization of customer-based brand equity

To understand the brand resonance pyramid Keller's views on brand knowledge, brand awareness and brand image will be considered first.

Brand knowledge
Keller (1993) states that "brand knowledge is maybe an organization's most valuable asset and is a result of previous investment in brand marketing". Key to Keller's brand resonance pyramid is the concept of brand

knowledge. Brand knowledge creates the differences (differential effect) that result in brand equity. Keller uses the 'associative network memory model' to explain brand knowledge, where information is stored in nodes and the links between nodes. The strength of the associations determines how rich the knowledge will be or how many nodes or associations will be activated. Therefore, brand knowledge can be represented by one brand node with several associations linked to it.

Keller further asserts that the antecedents of brand knowledge are brand awareness (or brand familiarity) and brand image (brand associations or the consumer's perception of the brand). Brand awareness relates to the strength of the brand node in the consumer's mind and brand image refers to other associated nodes in the consumer's memory. Therefore, "customer-based brand equity" occurs when the consumer has a high level of awareness and familiarity with the brand and holds some strong, favourable, and unique brand associations in memory" (Keller, 2008). It is sensible to elaborate on brand awareness and brand image.

Brand awareness
As with brand knowledge, brand awareness has antecedents, namely brand recognition and brand recall. Brand recognition is a consumer's ability to recognize a brand based on a brand cue, while brand recall is a consumer's ability to recall a brand from memory if given the need that the offering category satisfies, or the offering category itself as a cue. Brand awareness is created by raising brand recognition and by improving brand recall. Repeated exposure of the consumer to a combination of brand elements through the marketing mix is more effective in creating brand recognition than brand recall. Improving brand recall involves establishing linkages in the consumer's memory between the brand and the category and relevant purchase and consumption cues. The aim of brand awareness is to get consumers to think of the brand when they think of the offering category, so the strength of this association is important (Keller, 2008).

Brand image
A positive brand image is created through the establishment of strong brand associations in the mind of the consumer. These associations should be "strong, favourable and unique". Relevant and consistent information strengthens brand associations so that the brand has various retrieval cues. There are three types of brand associations, namely attributes, benefits, and attitudes. Brand associations should be derived and aligned to brand positioning that is important to consumers and differentiates the brand in consumers' minds. This is at the heart of differentiation and creating a sustainable competitive advantage or unique selling proposition. There normally are general attributes and benefits that consumers expect all brands in a category to display. In this instance a brand should develop differentiation through additional attributes and benefits or at least exemplify the general attributes and benefits as best in the category. Category associations may also be linked to a brand. (Keller, 2008).

Brand awareness may suffice to create brand equity for low involvement decisions, but in most instances both brand awareness and brand image is needed to create brand equity. An organization-proprietary brand (store brand, private label, generic brand, own brand, retailer brand) may, therefore, be seen as an unbranded offering or a commodity if it merely represents the offering category and satisfies the basic category need. In such a case price will become the deciding decision-making factor. For high involvement purchases both brand awareness and brand image are important (Keller, 2008). To summarize, brand equity is built by creating a familiar brand identity (through the choice of brand elements) and a positive brand image (strong, favourable, and unique brand associations), which is integrated into the marketing mix (Keller, 1993). This forms the basis of the brand resonance pyramid.

Keller's brand resonance pyramid
The brand resonance pyramid (Figures 1 and 2) consists of six brand building blocks, namely 'brand salience', as a first level; 'brand performance' and 'brand imagery', as a second level; (consumer) 'brand judgments' and (consumer) 'brand feelings', as a third level; and (consumer-) 'brand resonance', as a fourth level (Hutt & Speh, 2013). Each of the four levels or sequential stages stage are reliant on achieving the objectives of the previous stage. Each stage entails a question; which consumers ask of brands. These stages and related questions are (Keller, 2008; 2001):
- Establishing the proper "brand identity = Who are you?"

- Ensuring that consumers are able to identify the brand and associate the brand with a specific need or offering category in consumers' minds.
- Creating the appropriate "brand meaning = What are you?"
- Establish brand meaning as the sum total of tangible and intangible associations in the minds of consumers.
- Eliciting the right "brand response = What about you? (What do I think or feel about you?)".
- Eliciting the appropriate consumer response to stages 1 and 2, that is 'brand identity' and 'brand meaning'.
- Forging appropriate "brand relationships = What about you and me? (What kind of association and how much of a connection would I like to have with you?)". This deals with converting brand response into a loyal relationship between consumer and brand.

There is duality in the brand building process. This means that brand equity can be built by focusing on the block up the left side of the brand resonance pyramid, namely 'salience', 'performance', 'judgements' and 'resonance' - representing a "rational route" to brand building, or by implementing the building blocks up the right side of the brand resonance pyramid, namely 'salience', 'imagery', 'feelings' 'resonance - representing an "emotional route" to brand building. Most strong brands follow a branding strategy that includes both rational and emotional dimensions.

Overlaying the marketing mix onto the brand resonance pyramid
Brand resonance should be considered as the goal of brand building activities and gives focus to brand marketing decision making. A strong brand is built by properly planning and executing the linked steps of the brand resonance pyramid with the consumer (Keller, 2001). The bottom three building block ('salience', 'performance' and 'judgements') are communicated to the consumer through the marketing mix, therefore the extended marketing mix for services is overlaid onto the brand resonance pyramid in Figure 1.

Figure 1: Extended marketing mix and brand resonance pyramid overlay (Source: model from Keller, 2008 and annotations by author)
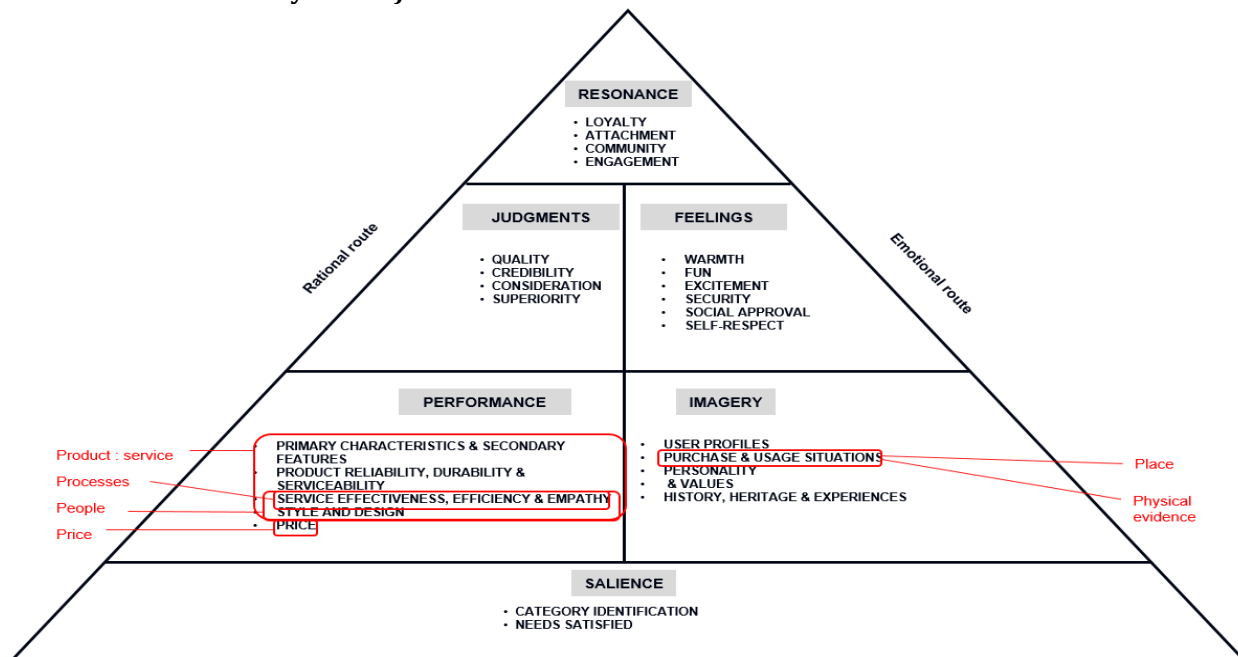
The building blocks and sub-dimensions that the extended marketing mix elements product, price, place, people, processes and physical evidence relate to is evident from Figure 1. The outstanding element of the extended marketing mix, namely the promotional mix, cannot be indicated on Figure 1 because it is the communication strategy or channels through which the other elements are communicated.

A much broader and comprehensive comparison, than the descriptions above, was undertaken of Aaker and Keller's models. This comparison is reported on in Table 1 and Figure 2 below.

Comparisons of Aaker and Keller's brand equity models
Table 1, below, is a comparative summary of Aaker and Keller's models and Figure 2 indicates the parity between these models visually.

Table 1: A comparison of Aaker and Keller's brand equity models

Aaker's brand equity model	Keller's brand resonance pyramid	Parity of Aaker and Keller's brand equity models
Loyalty Discussion starts with brand loyalty. Brand loyalty can be influenced by brand awareness, perceived quality and brand association dimensions, but these asset dimensions do not always explain brand loyalty, since brand loyalty can occur independently from these dimensions. Brand loyalty can be considered both a dimension of brand equity and an outcome of brand equity	**Resonance** Discussion ends with brand resonance, of which brand loyalty is a sub-dimension. Brand resonance is the result of all the other brand building blocks. Brand loyalty and brand equity are distinct constructs and loyalty is a sub-dimension of the brand resonance pyramid, which builds brand knowledge that feeds into brand equity. Loyalty is a characteristic of strong brand equity.	**Loyalty/ Resonance** Aaker's brand loyalty asset dimension (including the loyalty pyramid) corresponds to Keller's brand resonance brand-building block. Aaker refers to the loyalty pyramid with a hierarchy of loyalty levels and Keller arranges the brand resonance sub-dimensions in order of importance.
Awareness Provides a hierarchy (brand awareness pyramid) with increasing importance from unawareness of the brand, brand recognition, brand recall to top of mind awareness, and adds another level to the top of the hierarchy, which is named dominant brand, which is the only brand recalled in a category.	**Salience** Includes explicitly that a brand should satisfy consumer needs.	**Awareness/ Salience** Aaker's brand awareness asset dimension (including the awareness pyramid) corresponds to Keller's brand salience brand-building block.
Perceived quality The benefits of perceived quality to channel members are addressed.	**Performance and judgments** Judgements are based on imagery and performance.	**Perceived quality/ Performance and judgments** Aaker's single perceived quality asset dimension corresponds to two of Keller's brand-building blocks, namely brand performance and judgments.
Brand associations Provides eleven types of associations.	**Imagery and feelings** Provides five personality types and six types of feelings. Makes values explicit.	**Brand associations/ imagery and feelings:** Aaker's single brand associations asset dimension corresponds to two of Keller's brand-building blocks, namely brand imagery and brand feelings. Brand associations are explained to support positioning strategy.

Aaker's brand equity model	Keller's brand resonance pyramid	Parity of Aaker and Keller's brand equity models
General	**General**	**General**
Models brand equity from the organization and consumer's perspective.	Models brand equity from the consumer's perspective.	Most dimensions with sub-dimensions correspond.
Brand equity and brand value are used synonymously.	Clearly distinguishes between brand equity (the brand as asset) and brand value (financial worth).	
Emphasis is on the benefits of brand equity dimensions to the organization and consumer.	Includes different stages (with consumer questions), corresponding objectives and sub-dimensions supporting each brand-building block.	
Displays various brand dimensions and indicates causal interrelatedness between them.	Sequences the particular order in which the brand-building blocks relate. Has four distinct stages of brand development with corresponding branding objectives, and it is made clear that lower order building blocks are a prerequisite to higher order building blocks.	
Brand dimensions seem to be on the same plane, allowing various points of entry to building brand equity.		
More explicit means to create, maintain and improve asset dimensions.		
	Offers two routes to brand building, namely going up the left side of the brand resonance pyramid (called the 'rational route'), and going up the right-side of the brand resonance pyramid (called the 'emotional route').	
	The aim of the brand resonance pyramid is to created brand knowledge.	
Other proprietary brand assets		
Includes patents, trademarks, channel relationships, and so on, which are important from the organization's perspective.	Not included because the brand resonance pyramid models brand equity from the consumer's perspective.	

Source: Aaker, 1991 Keller, 2008; Keller, 2001; Keller: 1993; Taylor, Celuch and Goodwin, 2004

The comparison that is summarized in Table 1 is displayed visually in Figure 2 below.

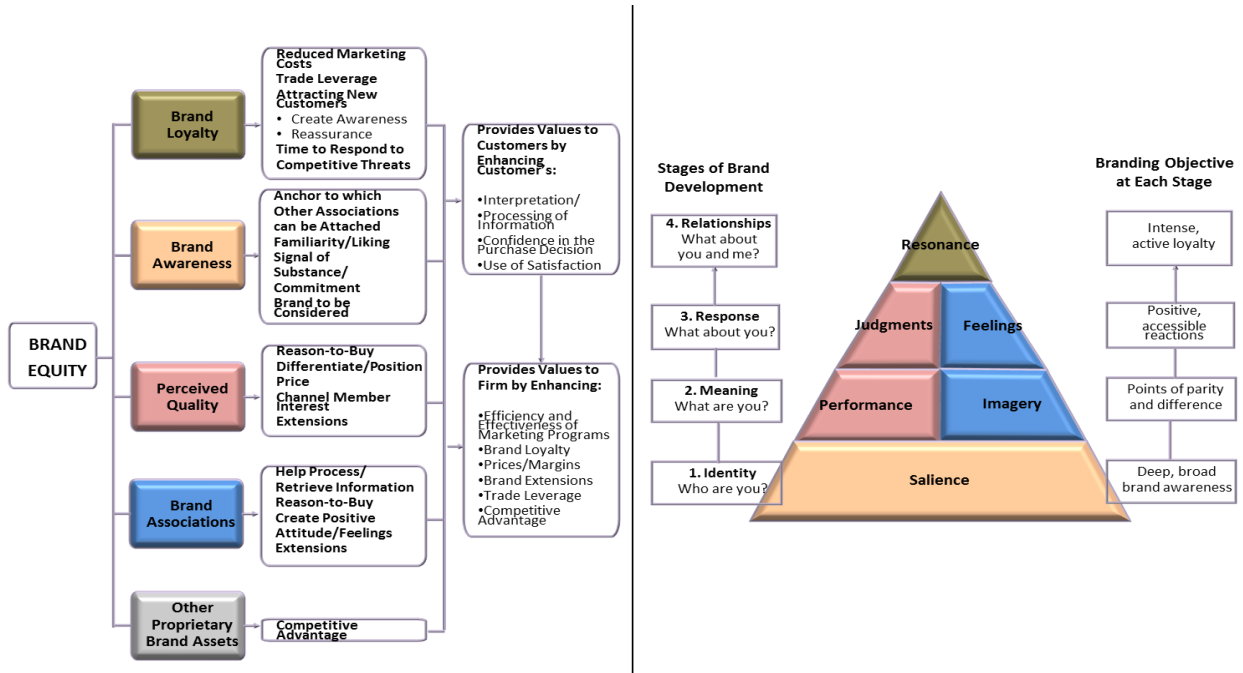**Figure 2: Sub-dimensions of brand resonance pyramid elaborated and related to extended marketing mix**

Figure 1: Aaker's brand equity model
Source: Aaker (1991: 270)

Figure 2: Keller's customer-based brand equity pyramid
Source: Keller (2001: 17)

Figure 3.6: Parity between Aaker and Keller's models
Source: Aaker, 1991: 270; Keller, 2001: 17

Looking at the main dimensions or building-blocks of Figure 2 above there is nothing at all that looks similar at face value. Not a single building block of the two models has the same name. The models present as two distinctly different models. However, the preceding comparison indicates that Keller's six brand-building blocks include virtually all of the concepts that are covered by four of Aaker's brand asset dimensions. Keller's 'Salience' brand-building block subsumes Aaker's 'brand awareness' asset dimension; brand awareness is created or should be created during/ within the Salience block. Aaker's 'perceived quality' dimension is included in Keller's 'judgments' and 'performance' blocks; Keller's model has a sub-dimension called perceived quality within these building blocks. Keller's 'feelings' and 'imagery' blocks is where Aaker's 'brand associations' dimension is created and Keller's 'resonance' block is what Aaker's calls the 'brand loyalty' dimension; loyalty is a sub-dimension of this block of Keller's model. Aaker's brand equity model, however, has one brand asset dimension called "other proprietary brand assets", which refers to "patents, trademarks, channel relationships, and so on", which is not included in Keller's brand resonance pyramid. This is probably because these assets provide value to the organization, but not to the consumer directly, therefore, they do not form part of the consumer based view of brand equity.

Interestingly, Keller was involved with the first two branding research efforts that Aaker undertook and Aaker acknowledges Keller for his input and vibrant discussions (Aaker, 1991; 1996). Keller, in turn, supervised Jennifer Aaker's (Aaker's daughter) Ph.D. in Marketing (Haas, 2006) and acknowledges her (Keller, 2008). Aaker and Keller's brand equity models seem to be very different (Figure 2) and it can be confusing to know which model, both models or a combination of the model to use as brand management guide. But in the final analysis the models are not so different. It was found that the brand equity dimensions were labelled and arranged differently, but are mostly similar when the models are overlaid.

The research that underpins the brand resonance pyramid was mostly concerned with consumer products and not services specifically (Steenkamp, 2016). In addition, the applicability of the brand resonance pyramid to the B-to-B sector in questioned (Kuhn, Alpert, and Pope 2008; Christodoulides, Cadogan, and Veloutsou

2015; Christodoulides and de Chernatony 2010). For the purposes of future research, it is therefore suggested that the brand resonance pyramid be applied to different B2B services contexts to tailor or adapt the model. The implication for practice is that, at this stage, brand practitioners can use either of the models to guide brand-building practice, not both and the two models do not combine, rather they overlay. The models are seminal and crucial to brand management, but the differences are much ado about nothing.

5. Conclusion

The purpose of the study reported on here was to determine which of Aker or Keller's models (Figure 2) should be used to apply to a B2B services context with the aim of possible amending it. The dilemma was that the models look different, but are they? The key issue was: Which one of the models should be used to guide brand management, or should both be used or maybe a combination of the two.

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Paper 29

Evaluating the Experience of Students As Actors In A People Intensive Service Delivery System

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Abstract: South Africa's higher education landscape has gone through some turbulent waters of late. Students play a fundamental role in this intensive university service delivery system. This study's aim was to evaluate students' needs, frustrations, challenges, experiences and emotions as actors within a people intensive higher education service delivery system. It places the student as the centre of the service design approach and highlights several areas of exploration wherein students are actors within the system. The study adopted a qualitative approach. Several group interviews were conducted with students. The collected data was analyzed using an inductive content analysis approach. The main results indicated that overall the students' experience and emotions are positive, albeit a few areas of improvement is needed. Students need extra attention during their first year of study and some of the service departments need improvement. The contributions of this study are on the practical implementation of an improved service design and eliminating these service gaps.

Keywords: *Students, South Africa, Service design, Systems theory, Higher Education.*

1. Introduction

Students form a cardinal part of a university and can be described as one of the main actors in the university service system (Bassi, 2019). Compared to Western Universities, South African Universities however face different challenges in serving student needs (Dell, 2018). Originating from an imperial past (Strydom, 2016) - South Africa's very first university being modelled on the University of London (Carruthers, 2018), South African Universities have evolved a lot over time, and are very different from their Western origins and more transformed compared to the start of 1994 (Bunting, 2002). With this evolvement and transformation, new opportunities and hurdles have surfaced. With reference to students, South African universities face distinctive challenges (Dell, 2018), especially when compared to its Western colleagues in terms of servicing students. South African universities therefore require alternative approaches and thinking to address these challenges and to manage the success of its students.

The most prevalent challenge across universities in South Africa is funding. According to the Minister of Education, students with inadequate funding face issues such as food security, accommodation and obtaining textbooks. Most of these students tend to be poor black working-class students, and these issues require unique funding models. Government initiatives such as the Department of Higher Education and training (DHET) bursary scheme (NSFAS) is however addressing these issues by providing adequate funding for the latter aspects, but only to those students coming from a household income of below R350 000 per year. The success of these funding models however remains to be determined and will only be confirmed after a longitudinal analysis has been concluded in the coming years (Dell, 2018).

As both intellectual and social contributors and constituents of societies (Strydom, 2016), South African Universities have a duty to shape its students in order to contribute to the broader society's wellbeing. In achieving this objective, universities are faced with challenges in the form of student pass rates and throughput rates and providing additional academic support to struggling students, all whilst still ensuring that students obtain quality degrees. These challenges place a lot of strain on universities and require innovative methods, unique to the South African context, to manage and solve. The Minister of Education called on universities to take responsibility for students' success and argues that this can only be achieved by understanding the students' needs (Dell, 2018).

In addressing this call by the Minister of Education, this paper aims to uncover student problems and challenges in a South African context and to review possibilities for improvement. The paper is specifically positioned in a service design thinking and systems theory approach, and therefore places the student at the centre of the service design process. It aims to explore and uncover students' needs, frustrations, challenges, experiences and emotions as actors within a people intensive, higher education service delivery system. Serving as a first step to uncovering and understanding these problems, this paper commences with undergraduate business students' perspectives at one university and specifically explores:

- Undergraduate students' experience of studying at a HEI (higher education institution)
- Undergraduate students' emotions experienced as actors within a university system
- Potential service gaps in students' experiences as key service receivers in a university system

The paper initiates with a literature review detailing the South African higher education context and discusses university as well as student challenges. This is followed by an explanation of universities as large interconnected systems and the application of service design thinking to understand and design services. The nature of the paper's objectives called for a qualitative research approach, which is detailed in the methodology section. This is followed by a discussion of the results, findings, managerial implications, limitations and avenues for future research.

2. Literature Review

The literature review section endeavours to place the students as actors in the middle of an intensive service delivery system. The key research issues addressed in the literature review involve the following:

- South African higher education
- Universities as systems
- Service design

South African Higher Education
The global drive to gain access to higher education, has among others, been fuelled by the likes of economists such as Thomas Pikkety. He advocates for the need for social investment in higher education institutions, in particular, as an important method to address problems of highly unequal societies (Hornsby, 2015). South Africa is home to one of the most unequal societies in the world (Baker, 2019), and unlike its Northern (USA and Europe) or often referred to as Western world counterparts, faces a unique set of challenges. Core-periphery relations is a concept that originates from world-systems analysis and dependency theory, and this concept suggests that countries such as South Africa fall into the periphery classification as a developing country in the global south, whereas the core is represented by the developed countries (USA, Europe). This division not only refers to a geographical one, but to the developed countries representing the ideas, knowledge, culture and resolutions for modernity, and being privileged over those countries lying in the periphery (Nkomo, 2015). This notion and thinking have been strongly opposed in recent years in South Africa, and this opposition was evident with the Rhodes must fall movement that started at the University of Cape Town (Njamnjoh, 2015).

South Africa is also faced with a complicated past of an Apartheid heritage - today trying to recover from Apartheid's various institutionalized practices (Nkomo, 2015). One such initiative to overcome the division between previous racial divisions at universities included the merging of several previously disadvantaged universities with previously advantaged universities. This reduced the number of universities in South Africa from 36 to 23 (and later 26 with the establishment of three new universities) (Davids & Waghid, 2016). Even after the mergers, transformation is still an ongoing process. One example of some of the more recent challenges include the need to transform university senates, a structure originating from a UK practice, which due to the nature of the country's history is still described as consisting of predominantly white professors, with limited representation of the broader university student and staff make-up (Hornsby, 2015). Another challenge is that of student access due to funding. In October 2015, despite related protests having happened in earlier years at previously disadvantaged universities, the fees must fall protests arose, this time at predominantly previously advantaged universities. It is argued that these protests gained more attention and media coverage, compared to any past efforts to oppose fee increases and challenges, because they originated

from previously advantaged universities (Davids & Whaghid, 2016). These protests eventually resulted in the South African government not increasing university fees for the following year, as well as the later announcement of fully funded education for those individuals having a household income less than R350 000 per year (Dell, 2018).

Universities are intellectual as well as social institutions, and therefore act as not only contributors of knowledge in society, but also important constituents of society (Strydom, 2016). Scholars also argue that there is a strong link between a country's assigned designation by the World Bank's classification of a country's income levels, and its higher education priorities. This suggests that higher education institutions have a more critical mission and are the engines responsible for local and national knowledge development. All of these aspects are seen in South Africa, whilst grappling with economic, political and social transitions (Nkomo, 2015). South African universities therefore have a large responsibility. They need to manage the pressure of transformation, generate new knowledge, provide quality education, support a large portion of students from disadvantaged backgrounds to adapt to their environments and successfully achieve their qualifications, manage throughput and pass rates, and recover from the wounds of colonialism through a focus on incorporating indigenous knowledge in its curriculums. (Davis & Waghid, 2016; Dell, 2018; Nkomo, 2015; Strydom, 2016).

The demand for higher education and therefore the number of student enrolments is already increasing at universities and is expected to increase substantially in future due to the growing and changing societal needs (Nkomo, 2015; Mabelebele, 2015; Mushemeza, 2016; Malele, 2011). This suggests the importance of a focus on student experience and the supplying of quality education to a set of diverse and growing number of students at South African higher education institutions. Universities are however large and complicated structures. It is therefore important to start at the beginning, by gaining an understanding of the functioning of universities, and to appreciate their large and complex systems. This means dissecting their workings piece by piece in order to move towards improving their functioning as large organizations of interconnected components that act as engines for societal change and upliftment.

Universities as systems
Popularly labelled as "systems theory", Niklas Luhmann, the German sociologist and founder of the theory, argues that social systems exist to reduce the complexities of human action. He contends that social systems are so complicated that they cannot function if not reduced into systematic components that interact with one another – otherwise there would be an infinite number of possibilities of events (Albert, 2016; Valentinov, 2013). All areas in a system therefore function in a synergistic and interdependent manner (Ingram, 2018). Over the years, systems theory has become widely applied in different fields, ranging from politics, art, religions, law and even sub-fields such as business management (Gerim, 2017). In the context of an organisation such as a university, this system is similarly composed of complicated and integrated sub-systems that work together to achieve effectiveness and efficiency. Systems theory in this instance can therefore aid in describing this interaction that takes place both within a university and between a university and its larger environment as an input and output relationship (Mofokeng, 2002).

This paper applies the notion of a systems theory approach in order to illuminate the role of specifically the student as having become an important and critical component in South African universities. The role of the student is isolated in this study, but in addition also explored against the background of the numerous sub-components and parts in the system that the students are exposed to, thereby improving the understanding of what affects and influences them. The student component in the university system further plays an important role, in terms of managing the reciprocal impact that their experiences have back into the societies served by the universities. Universities however remain service providers, and to understand the role of the student as best possible, a further approach is taken by positioning the paper in a service design perspective. This orientation further allows for the placement of the student at the centre of the process and to uncover their challenges and frustrations as they progress and function within the system.

Service Design Service design is rooted in the application of unique and creative ways of working when improving or developing people-intensive service systems. It is also highly focused on uncovering and

understanding the different interactions that occur between various stakeholders during service consumption (Segelström, 2013). By reviewing these interactions, a service design approach thereby attempts to gain a holistic understanding of the entire customer experience as the service is received and consumed (Wetter-Edman, 2011). Service design further fundamentally relies on design thinking in the service context. In design thinking, designers frame problems and opportunities from a human-centered perspective by using visual methods to explore and generate ideas and to engage potential users and stakeholders (e.g., Brown 2008; Ojasalo & Ojasalo, 2015). Designing can be understood as designers co-creating problems and solutions in an exploratory and iterative process in which problems and solutions co-evolve (Cross 2006; Dorst & Cross 2001). Stakeholder experience is one of the central areas of development in the service sector and is at the core of design thinking as it relies on co-creation of value within the service environment (Patrıcio, Fisk, Falcao Cunha & Constantine, 2011; Liedtka & Ogilvie, 2011). Therefore, understanding the stakeholder and specifically, customer experience during the service design, is paramount. This is accomplished iteratively through insight gained by involving stakeholders.

To summarize, Stickdorn (2011) explains that service design consists of five principles:
- It is user cantered; the customer therefore forms an integral part of the process.
- It should be a co-creative environment; customers as well as any other stakeholders are involved, thereby ensuring that everyone's needs are met.
- A service should be split up into sequences of events in order to understand each aspect, touchpoint, experience and interactions that happen during the service.
- Evidence suggests that customers should obtain something tangible to remind them of the service encounter.
- Holistic thinking refers to the fact that the entire grand design should be seen as a whole, in order to experience how and whether everything fits together in the end, and to identify whether all sequences fit together correctly.

Summarizing the literature review, South Africa's past, the merging of several higher education institutions and the student unrest of recent years, has put a spotlight on universities, and specifically students' challenges and experiences. Universities are big complex social systems wherein students are role-players or actors. Using a service design and systems theory approach, the role that the students play within this complexity is evaluated, in order to better understand students' role in this complex system. The methodology section, detailing the approach taken in order to sample and collect data from the students, as well as the data analysis approach is presented in the following section.

3. Methodology

This study made use of an independent research agency to collect the data via group interviews. This data was recorded, transcribed and analyzed through inductive content analysis. Inductive content analysis is utilized in cases where there are limited studies on the phenomenon under investigation, and the coded texts are derived directly from the text (Vaismoradi, Turunen & Bondas 2013). In this study, the text used for coding was the transcription of the group interviews.

Target group and sample decision
The study applied a non-probability convenience sampling approach. Announcements were placed on the university's Blackboard system inviting students to participate in group interviews, and those participants that indicated that they were interested in participating in these group interviews attended the sessions. Fusch and Ness (2015) posit that the number of responses in qualitative research is determined when data saturation is researched. Data saturation is achieved when there is enough information to replicate the study, when the ability to obtain new information has been reached, and when further coding is no longer feasible. However, data saturation must fit the qualitative research design, which depends on the sample size of the population. Researchers should aim for rich and thick data – rich in terms of quality and thick in terms of quantity. Rich data is layered, intricate, detailed and nuanced. Data saturation is not about numbers, but about the depth of the data. Due to the total number of participants and the broad range of ages, years of study and the opportunity for participants to answer as extensively as possible, both rich and thick data were

gathered from the group interviews. Elo *et al.* (2014) state that the trustworthiness of content analysis depends on the availability of rich, appropriate and well-saturated data. Trustworthiness also depends on the way the data is collected.

4. Research analysis

This study used an explorative design, working through text with an inductively formulated category system, and it utilized the Mayring (2014) inductive content analysis procedural model (Figure 1).

Figure 1: Steps of inductive category management (Source: Mayring, 2014)
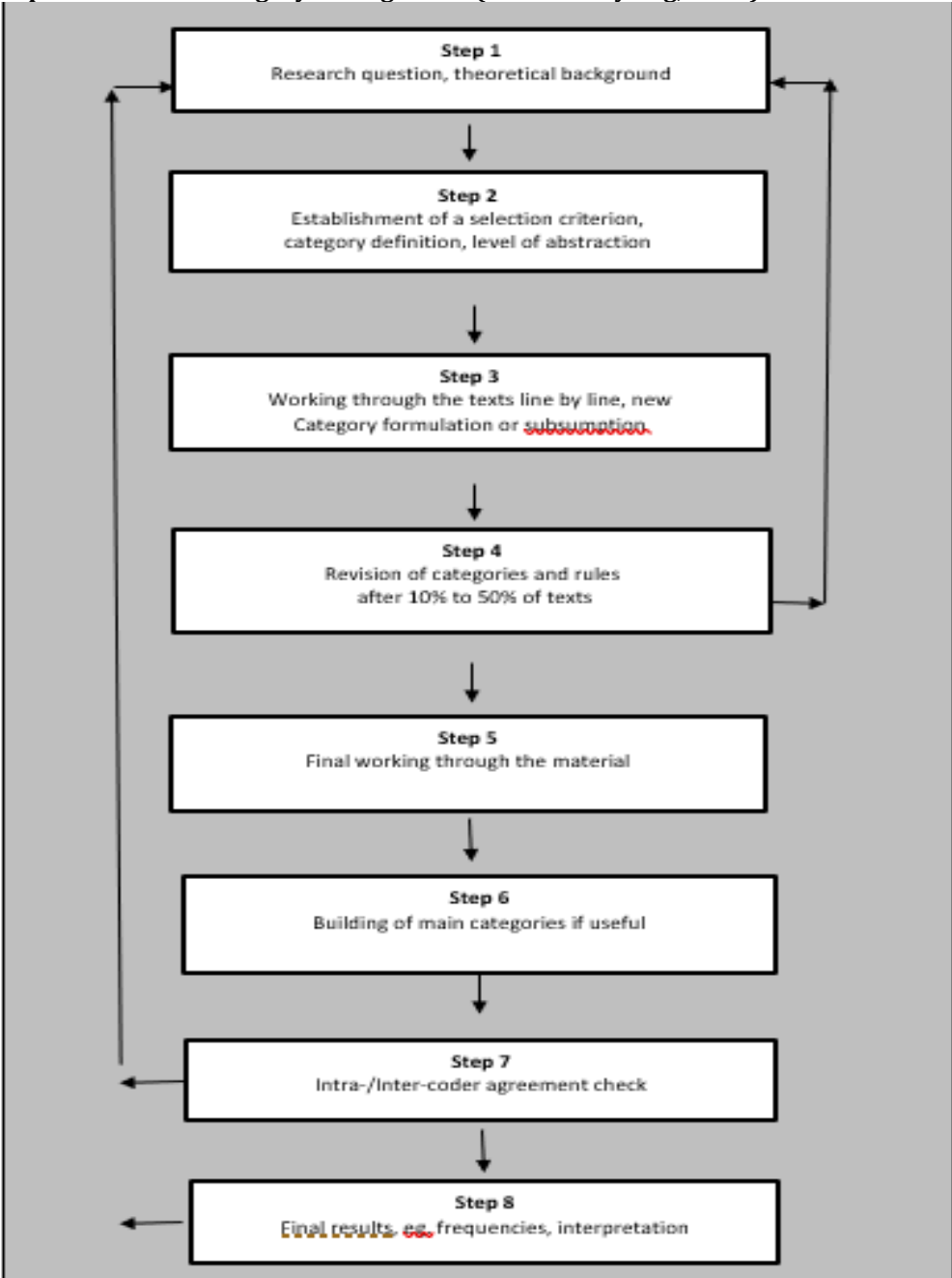
Step 1 – Research questions. Formulate a clear research question, not just a topic or a title. The research question must fit an inductive logic, which means it must be explorative. The aim of this study is to evaluate students' experience as actors within a higher education system. The theoretical background must be described using literature and previous studies. This section of the study is covered in the literature review section.

Step 2 – Category definition and level of abstraction. The category definition must be explicit and serves as a selection criterion to determine the relevant material from the texts. The level of abstraction defines how specific or general categories must be formulated, which is central to inductive category formation. For the purpose of this study, the areas of exploration were operationalised into category definitions. These are; the students' learning experience, the students experience of using technology, the students experience of their home department, the students experience of service departments and the students' experience of the HEI's physical location in a major city. Step 2 is covered in the introduction, the literature review and the respondents' feedback from the group interview. This group interview transcriptions served as the unit of the analysis.

Step 3 – Coding the text. Qualitative data coding decisions should be based on the paradigm and the theoretical approach of the study. The following coding methods were chosen for the data analysis. Attribute Coding was used to log essential descriptive information of the participants. In order to tap into the students' experience, In-Vivo Coding was used to honour the participants' voice and to ground the data analysis from their perspective. In-Vivo Coding is also very effective to develop new theories. Emotion Coding tap into the participants inner cognitive systems. Emotion Coding was used to label the feelings that the participants' have experienced and used the list of six main emotions as provided by www.englishstudyhere.com (Saldana 2009). Steps 3 to 7 were done on the transcriptions, each time improving on the previous step.

Step 4 – Revision. A revision in the sense of a pilot loop is necessary, when the category system seems to become stable. Check if the category system fits the research question. If it does not, a revision of the category definition is necessary. Check if the degree of generalization is sufficient. If there are only a few categories, then the level of abstraction is too general. If there are many categories, then the level of abstraction is too specific.

Step 5 – Final coding. The whole material, in this case the transcriptions, has to be worked through with the same rules – that is, category definition and level of abstraction.

Step 6 – At the end of this process, you have a list of categories. Group them together and build themes, keeping in-line with the research question.

Step 7 – Intra- or inter-coder check. Start coding the text from the beginning. Code text to categories.

Step 8 – Findings. The findings are at first the list of categories. If categories had to be found regarding several text passages, 4 transcripts as in this study, a frequency analysis of the categories' occurrence could be useful. The categories and the frequencies must be interpreted in the direction of the research aim. Step 8 revealed the findings of this study and is presented below.

Findings and Discussion

All group interviews were done on one campus and were facilitated by an independent research agency. The findings have been analyzed from the answers provided from focus group interviews and were formulated to reflect the main themes that emerged. Participants were anonymised apart from the details as per the Attribute Coding in Table 1 and therefore, direct quotations will be distinguished by referring to the groups as G1 to G4. Attribute coding is the notation, usually in the beginning of a set of data, of the basic descriptive information of the participants. Attribute coding provides essential information and sets the context for analysis and interpretation (Saldana, 2009).

Table 1: Details of the participants

Group interview number	Number of participants	M / F	Ages of participants	Year of study
G1	3	2 / 1	21 / 20 / 20	2 / 3 / 2
G2	5	4 / 1	21 / 19 / 19 / 22 / 22	3 / 1 / 2 / 2 / 3
G3	5	1 / 4	20 / 30 / 23 / 22 / 21	3 / 3 / 2 / 3 / 3
G4	11	3 / 8	22 / 23 / 22 / 21 / 22 / 20 / 20 / 21 / 21 / 22 / 20	3 / 3 / 1 / 2 / 1 / 3 / 3 / 3 / 3 / 3 / 2

The respondents were 42% male and 58% female. This reflects the South African population which stipulates that there are more females (52%) than males (Evans, 2018). All the participants are between 19 and 23 and the majority (58%) are in their third year of study. It can be argued that the third-year students have more experience as actors within this people intensive delivery system and therefore will provide valuable rich data. When participants were asked to explain their learning experience, one dominant theme emerged. The participants were initially overwhelmed but, as they articulate in levels, the learning experience seems to get easier.

"It's something that I am not used to, I would say it is somewhat a more advanced learning" G2
"But as time went on I got used to it and it has become like a success because I have improved" G1

This finding ties in with the notion that South African universities are responsible for more than only educating students on knowledge. Students feel overwhelmed at the start of their student career. Universities should therefore appreciate their roles as more than only knowledge providers, but as holistic service providers, and constituents of society (Dell, 2018; Strydom, 2016). Universities should help students to adapt to their new environment and should provide continued support throughout the process. As students indicate that their experience and performance improved over time, it proposes that the university has succeeded to a certain extent in supporting the student adequately as they have progressed through the system. On an emotional level the participants' learning experience can be described as energizing and confusing. Part of this feeling of confusion, to a lesser extent, included aspects such as the initial stress of the new environment, pressures from parents and/or others, language barriers, searching for friends/making a friend, new cultures and backgrounds, working with very tight assessment deadlines and often schedules in short time frames.

"So my learning experience was surreal, like a rude awakening in my first official year" G3
"It was extremely different from high school, I don't think they prepare us enough for that" G3

Students face numerous external pressures, yet they feel excited by the new chapters and experiences in their lives. Yet again, as the literature suggests, universities should position themselves in taking a constituent of society role, and not only an educator role (Strydom, 2016). Students feeling overwhelmed in their first year has been well documented in the literature (Bojuwoye, 2002; Zulu, 2008; Beyers & Joubert; 2016) and these findings suggest that this remains a critical part of the student university experience and a key driver to the students' future success. This phase of the student career is also characterized by low pass rates (Horn & Jansen, 2008; Marais & Gamow, 2009; Mabope & Meyer; 2014) and therefore remains an imperative part in the student experience and success at university.

On the issue of using Blackboard, an interface software platform between student and lecturers, the participants were very enthusiastic and lorded many praises for the system. The dominant themes picked up here were that Blackboard is convenient and advanced and the participants prefer that Blackboard is used in the context of learning. Some of the participants even said more content should be placed on Blackboard and not only material such as Power Point slides.

"It's convenient because you can get all the information in one place" G1
"It's a good thing that the technology is advanced…the times we are living in are all about technology"G2
The emotional coding revealed "energized" as the most dominant theme.
"My experience is that Blackboard is one of the most amazing things I've ever seen" G 1

Previous studies suggest that lecturers tend to perceive Blackboard as more of a communication system rather than a learning system (Kleinveldt, Schutte & Stilwell, 2016) and that there is a need from students for the provision of more quality of the content provided on the platform (Tella, 2012). This might explain students' needs in recommending that even more learning material should be placed on Blackboard.

On exploring the participants' experience of their home department, the findings are overwhelmingly positive. With a few exceptions here and there, most participants felt like their home department is helpful and welcoming.

"If you go to the department you get what you need…even if the lecturer is not there a substitute will be there , always someone you can go to, so far so good" G4
"Going to my department is always a good experience" G1

Another issue that was raised with the experience of home departments was that of lecturer consultation. The participants value the consultation process at the home department. This is where they get to meet other staff members and the tutors.

"When I started consulting, I knew where my department was, and the lecturers and tutors are good" G1
"From my experience I would say they are friendly with me and also in terms of consulting you get whatever you need" G2

Most of the participants experience happiness when dealing with their respective home departments. See comment directly above. Lecturers fulfil numerous roles; Firstly, they are educators, followed by researchers and learners themselves who not only share their research knowledge with their students, but also teach students critical and reflective thinking. Lastly, and very importantly, lecturers are also motivators and supporters, and should view their role as being important facilitators and/or mediators of the learning experience (McGie, 2008). Students clearly appreciate consulting, with both lecturers and tutors, as a form of engagement and learning mediation. Lecturers should therefore embrace this role and function of the learning process. When the students were asked to give feedback on their experience of service departments, the findings were overall negative. The service departments referred to are the finance department, faculty officers, intercampus busses, the registration process and the student centres. The participants are of the opinion that they are not being helped, are uncomfortable visiting there and often leave such a visit very frustrated.

"When you go to the faculty the lady gives you attitude over and above your frustrations" G4
On the issue of finances, most of the participants are unclear about their finances, especially those students who get bursaries form the National Student Financial Aid Scheme (NSFAS).
"Right now I have no idea where I stand with the varsity administration, especially when it comes to finance" G3
"Finance department is worse than a horror" G2

Exploring the issues of the inter campus bus services, the participants felt that there are peak bus times, where more busses should be employed, but overall the system is acceptable.
"…there are peak hours…Fridays there are long ques" G1
On the issue of the students' experience of the student centre, the sentiment was generally positive. The students feel that the student centre where the cafeteria is housed is user friendly, and everybody is welcome. This was also deemed an important space for interaction and getting to meet new people.
"I think they cater for everyone irrespective of colour" G 3

Emotionally the participants experience anger when dealing with the faculty as a service department. The following words came up when the interviewer asked the participants to describe their faculty officers.
"Anger, arrogant, ignorant, old-minded" G1

Due to the government funding provided to a few students to improve access to education (Dell, 2018), it is possible that there are larger numbers of students in need of support in terms of financial queries (more compared to the past). Additional pressures are therefore possibly experienced on these systems (receiving more student queries than usual), which could be a possible cause of bad student experiences at these departments. University enrolments are also growing rapidly (Mabelebele, 2015; Mushemeza, 2016; Malele, 2011). Service departments are responsible for servicing all students in a faculty, not just a specific segment of students (as is the case of a home department). It may therefore, like the finance departments, be possible that the student numbers are placing pressures on these systems, potentially resulting in overworked service department staff that start to lose compassion with student problems as they are exposed to so many student queries in a day. The same argument may also be made to excessive queues and waiting periods with bus services; there is an increase in student demand, with university systems unable to keep up with these. These are challenging times for universities, because there are not necessarily budgets available to provide this additional support – South African government pushes universities to increase their student enrolments, but university funding is provided at increases below the country's inflation rate (Hornsby, 2015).

Regarding the students' experience of the HEI's physical location in a major city, the students felt that the crime in Johannesburg is a deterrent and they are always aware of their surroundings.
"You are robbed here" G2
"You are always cautious" G2
However, putting the security issues aside, most of the participants felt that Johannesburg is a "nice" place to live in and very accessible.
"The place itself is very nice" G1
"It makes a lot of things accessible because when you get to town you just use the bus, you don't have to worry about taxi fees. The shopping centres as well" G1
On an emotional level, the participants felt happy when asked about the physical location of the HEI.
"I think because we are based in the inner city it is much simpler for us to inter-connect with other people and move around in the city" G3

In summary, the feedback received in general reflect a positive attitude. The participants valued their learning experience and their experience of technology assisted learning was also positive. The participants felt empowered, happy and energized on both these areas of exploration. The participants also felt happy in their dealing with their respective home departments and even want this to expand. This can be seen in the positive feedback received on the issue of consultation at the home department. With regards to the HEI's location within a major city, caution and happiness was expressed. It is important to note that four out of the five areas that were explored came out "happy" on the emotional experience chart. The only bad experience the participants had was dealing with the service department. This made them uncomfortable and created frustration.

5. Conclusion and Managerial Implications

Students have adaptation problems articulating from their high schools into a higher education institution. The learning curve increase is a major problem for students. Managers and staff need to be cognizant of this and provide additional support to first-year students. There are many forms that this support can take for example, a lesser workload for the students, managing assessment time better and more lecturing periods and workshops on how to adapt to university life. The use of Blackboard as an interface system should be kept and even increased. Lecturers should be encouraged to specifically focus on providing more quality content on Blackboard and move away from perceiving it as a predominant communication tool, but rather an overall learning tool. Consultation times at home departments can be increased as students relish visiting there. Consulting with the lecturer is an important form of additional learning to the students. The university needs to take a closer look at their faculty officers and how the finance department interacts with students. As discussed, the growing numbers of students may be placing pressure on these particular functions, and the university will have to re-look the functioning and activities as well as funding allocations and possibly increase staff numbers at these departments in an effort to improve the student experience.

It was also evident that students are uncertain about certain policies and procedures which place additional stress and queries on service departments. Innovative short videos or slides explaining university systems and policies, especially regarding marks, finances, pass rates and academic codes that are placed on blackboard for students to view, and therefore better educate them, may also relieve some unnecessary student visits to service departments. Lastly, Universities in South Africa needs to appreciate their roles as not only knowledge providers and educators, but important contributors to societies. Given the socio-economic nature of the country and its challenges, universities cannot afford to function in a mindset of only providing knowledge and education. Its responsibilities reach much further in terms of molding responsible citizens. Compulsory student workshops focusing on, for example, different life skills, values, ethics, job hunting and CV writing and personal financial management should all be considered in fulfilling this holistic role.

Limitations and Future Research
This study was conducted at one major university in an important economic city in South Africa. The results can therefore not be generalized. In taking a service design and systems theory approach in this paper, the

student was placed at the centre of the process and evaluated in isolation as a component of the larger system to understand the needs and challenges of this important element in the service system. In order to continue the need for understanding the holistic system and how the different stakeholders further co-create the service experience, further research may be conducted on specifically the service staff's experience at this institution, in order to gain their perspective and to match and solve the tension points between the engagements taking place. As the participants view the departments in such a good light, further research could also explore the view of the home departments as service providers and their roles in the student's education experience and service needs. It is also encouraged that researchers from other South African institutions undertake similar studies, in order to identify overall themes pertaining to institutions of higher education in South Africa.

Conclusion

The paper aimed to uncover students' problems and challenges in a South African context and to review possibilities for improvement. This was done by evaluating undergraduate students' experience as actors in an intensive university service delivery system. The specific objectives included to explore

- Undergraduate students' experience of studying at a higher education institution; the findings suggested that despite many times, because of bad press and student riots, one would think that the students experience the university system as wanting. This paper proved quite the contradiction – students are generally happy.
- Undergraduate students' emotions experienced as actors within a university system; similar to previous literature, students seemed most distressed at the start of their academic career and experience emotions of feeling overwhelmed and confused. Continued support should therefore be provided during the first year. These feelings later turn into stronger confidence and feelings of achievement and growth.
- Potential service gaps in students' experiences as key service receivers in a university system; the study revealed that service departments, such as the finance departments and faculty, were the largest sections in the system that caused student frustrations and negative emotions.

Ethical Clearance and Acknowledgement

The proper ethical procedure was followed as per the university structures and policies and an ethical clearance certificate was issued for this study. The researchers would also like to acknowledge the university's role and contribution in providing funding to conduct this research.

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Paper 30

Support staff experience in the effective functioning of universities: A co-creation perspective

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Abstract: African Tertiary institutions (universities) are confronted with many challenges including those of poorly supported students, academics that have little resources to conduct their jobs, and support staff that are deemed as "less important". In order to develop the African tertiary institution into one that can compete on a global level and develop students that can find creative and context related solutions to burgeoning African business problems, it is essential that these institutions understand how all areas of the institution function collectively and support each other. The concept of systems theory states that all areas within the institution should work in an integrated way and combining the aspect of co-creation, each area should co-create and increase the value provided to each stakeholder at each point of interaction. The aim of this study is to explore the experiences of support staff within an African Tertiary institution in order to identify where gaps in the service delivery and the overall co-creation process lie. An exploratory research design and interpretivistic research philosophy was used to conduct qualitative in-depth interviews with 10 support staff (ranging from programme co-ordinators to general academic support staff, faculty officers and secretaries). From the nine themes identified from the findings it is evident that support staff deal with many stakeholders within the tertiary institution and that it is important to ensure that daily tasks and systems are improved for better co-creation with other stakeholders.

Keywords*: Systems theory, co-creation, networking theory, tertiary institution, support staff*

1. Introduction

The African Tertiary and Higher Education system has faced a number of changes in the last few years and are subsequently facing greater challenges in the years ahead. These challenges come from student protests, insufficient funding and high unemployment rates (Mampane & Omidire, 2018). Tertiary institutions therefore need to adapt to this changing environment in order to remain competitive and attract quality students. For this to occur, tertiary institutions need to ensure they function as a system within this complex environment and work with all stakeholders involved in delivering quality services. One of these stakeholders are the support staff which are often neglected in research but are essential in playing a role in innovation within a Tertiary institution (Rothmann & Essenko, 2007). For the purposes of this paper, support staff are any non-academic and non-managerial employee working at a Tertiary institution in South Africa whose role it is to provide secretarial, financial, IT, and administrative support to academics, managers and students at the Institution. As these support staff often deal with conflicting pressures from academics, managers and students, their role within the proper functioning of a Tertiary institution becomes vital (Rothmann & Essenko, 2007). The rest of this paper therefore focuses on the role of complexity theory, systems theory and networking theory as ways in which the co-creation of value can be developed by support staff within the Tertiary institution system, as part of the literature review. Thereafter, the problem statement, methodology, results and recommendations are provided.

2. Literature Review

As a Tertiary institution is a complex system working with many stakeholders, the literature review commences with a brief description of complexity theory within a business environment. This is then linked to the idea of systems theory as all stakeholders work within a complex system. For this complex system to function well, it is essential that relationships are developed within the networks in the system. The authors posit that once this occurs, the need for co-creation within the system becomes essential as that leads to

efficient and effective services being designed. The final section of the literature review considers the theories within the Tertiary Higher education system and specifically considers the need for support staff to be part of this system.

Complexity theory

Holbrook (2003) quoted by Frow, *et al.* (2015) explains that complexity theory is essential to understand from a business and marketing paradigm as these systems comprise numerous stakeholders each with their own dynamic interactions. This is specifically true within a service setting such as Tertiary education. This theory is multidisciplinary in nature and states that the functioning of each element within a system and how that functioning interacts, and relates to other areas in the system needs to be determined, specifically as many interactions do not follow a rational process (Koopmans, 2016). Basile, *et al.* (2018) add that from a service provider perspective, complexity theory should also be considered as a way to assist service providers in determining how to adapt to various challenges and situations caused by changes within the system that may be outside of the providers' control. This therefore also requires the service provider to be an adaptive system.

Systems theory

As complexity theory states the service providers' work within a complex system needs to be adapted based on the situation; it is necessary to consider systems theory within this study. Sim, Conduit and Plewa (2018) explain that a service system is one where all stakeholders are involved in creating service exchanges within a self-adjusting system. Ingram (2018) explains that systems theory requires all areas within a system work in such a way that they are interdependent of each other, and identify ways to encourage collaboration with each other. Von Bertanlanffy (1972) describes Luhmanns' systems theory as one that can be utilized in many fields, but is specifically relevant for a business that functions with many employees, units and departments. Each of these need to identify how they fit into the bigger system of, for example, a Tertiary institution. Many organizations do not want to consider systems theory as a way to function within a changing and dynamic environment as it is considered to be challenging and complex to implement (Gerim, 2017). As Jaaron and Backhouse (2017) describe, systems theory, although challenging, must be integrated throughout the entire organization in order to determine system participants and how they function. This therefore requires that throughout the system, the experiences of all stakeholders must be identified and considered (Harvianen, Ojasalo & Kumar, 2018).

Networking theory

Briscoe, Keranen and Parry (2012) explain that within systems theory, there are critical networks that are developed within the system which also need to be considered. Albinsson, Perera and Sautter (2016) continue that within collaborative systems, all stakeholders need to consider their networks and identify how each network partner adds value to the systems and functions within the system. Edvardsson, Tronvoll and Gruber (2011) explain that a network is embedded within a service and that it is essential for all resources available to be provided to stakeholders within the system. Therefore an important element of networking theory is that systems obtain value and resources from its network partners, rather than just the assets available within an organization. Networking theory with systems theory therefore considers how value is added within the entire system through networks and determines how value can be co-created by network interactions (Frow *et al.*, 2015; Briscoe *et al.*, 2012).

Co-creation and Service design

Within the context of systems theory, from a services perspective, co-creation occurs when networks within the system function well together and all stakeholders are involved in the development of a service that adds value to all and lies within the Service Dominant Logic (SDL) developed by Vargo and Lusch (Edvardsson *et al.*, 2011). Sutarso, Halim, Balgiah and Tjiptoherijanto (2019) explain that co-creation should be focused from a company perspective (i.e. internal stakeholders) and from a customer perspective. From a service perspective, it is essential that both perspectives are considered when designing a service or identifying ways to solve complex problems. This again, like in systems theory, requires that the experiences of the participants are considered (Harvianen *et al.*, 2018). The concept of service design requires that all stakeholders' experiences with the service must be considered as this will fundamentally influence how the

service should and will be designed and presented (Følstad & Kvale, 2018). Brakus, Schmitt and Zarantonella (2009) explain that the experiences of stakeholders should be considered from various aspects including social experiences, behavioural experiences, feelings, thoughts and actions.

Co-creation and Service design within Tertiary institutions
Tertiary institutions are very complex systems functioning within a local, national and international level (Mofokeng, 2002). In Africa, this is specifically true, based on the increased demand for decolonization in Africa, high employment rates amongst graduates, student protests and low levels of government funding for tertiary education (Mampane & Omidire, 2018). Aubgre (2018) clearly states that Tertiary institutions play a vital role in the development of economic growth and therefore these institutions need to consider the role they play within the local, national and international system. As there are various points of interaction within a Tertiary education system, each of these should be seen as a way to co-create value (Briscoe *et al.*, 2012). From a services perspective, all stakeholders use the system in one way or another and their experiences should be considered to reduce any gaps that can cause stakeholder dissatisfaction (Maduro, Fernandes & Alves, 2018; Durl, Trischler & Dietrich, 2017). Rothmann and Essenko (2007) state that support staff are vital stakeholders within the tertiary education system but are often ignored in terms of their ability to create knowledge and innovative services. This is supported by Voss and Gruber (2006) who explain that depending on how effectively internal systems (those that include support staff) are functioning will influence how well external customers' problems can be solved while providing quality services.

Problem Statement
Sutarso *et al.* (2019) state that understanding co-creation and identifying stakeholder experiences from a higher education perspective are limited. Aubgre (2018) emphasizes the need for research within the Tertiary education system due to the importance this sector has in the development of new knowledge and skills required for the proper functioning of society at large. The drive of African Tertiary institutions to reach higher global rankings again require that the entire system functions well and effectively, but this is rarely the case. Specifically, in terms of support staff, Rothmann and Essenko (2007) explain that these staff experience different issues compared with academic staff within Tertiary education as these staff experience a high level of demands but have limited resources to function within. Roberts and Dunworth (2012) explain that studies considering the experiences of support staff have been largely ignored with focus being on academics and students. Some studies on support staff have focused on their stress levels and its influence on job satisfaction, but not on their experiences within the system and the system that they are functioning in. Bovill, Cook-Sather, Felten and Moore-Cheery (2015) state that in many studies the role of co-creation between academics and students have been considered, but the experience of support staff within that system and their ability to co-create value has not. Aubgre (2018) emphasizes that leveraging the support staff skills into resources that will increase governance levels, administrative compliance and innovativeness are essential to create positive outcomes and better service delivery for the system as a whole. Therefore, focusing on support staff and their experiences within the systems theory context is essential to create a more efficient and effective system that can lead to higher levels of innovativeness, service delivery, job satisfaction and engagement (van Straaten, *et al.,* 2016). Based on the above, the following objectives are set:

- To examine support staff working at a Tertiary education institutions' experience
- To explore the factors that affect support staff working at a Tertiary education institution experience
- To uncover how support staff function within a larger Tertiary education institution as a key service provider
- To identify potential gaps in the support staffs' experience in their daily tasks and responsibilities as key service providers within the Tertiary education institution.

3. Methodology

An interpretivist research philosophy was followed in this research. Specifically a qualitative approach by utilizing an exploratory research design. A probability sampling approach, namely systematic random sampling, to identify participants was followed. Each participant for the study was selected from a list of support staff that appear on the specific Tertiary education institutions internal email list, where a skip interval was used to identify a total of 10 participants ranging from secretaries, finance officers, IT staff and

academic support staff. All relevant ethical and procedural considerations were followed in obtaining the list and contacting potential participants. Once approached via an introductory email, participants were informed of the nature of the study and were invited to participate in the study. Only those participants who provided informed consent were then contacted for an in-depth personal interview. An external research company conducted the in-depth interviews and transcribed the data to ensure no researcher bias, as well as the confidentiality and anonymity of participants. The in-depth interviews followed a semi-structured interview guide aimed directly at answering the research questions and lasted between one to one and a half hours. According to Guest, Bunce and Johnson (2006), six to eight participants in this type of study would allow for saturation to be reached. In this study, saturation was realized after six interviews. The data analysis process suggested by Strauss and Corbin (1990) was used where researchers read the transcripts and developed codes using an inductive approach. The codes were compared through repetition and re-reading and a set of final themes were identified (Spiggle, 1994). The use of various researchers ensured triangulation which contributed to the credibility of the findings.

4. Findings

This section focuses on discussing the results obtained from the data analysis phase. Table 1 below describes the demographic profile and the different roles of the 10 support staff interviewed. Each participant was allocated a pseudonym to ensure anonymity. The participants ranged from being five months to eight years in their current position.

Table 1: Participant demographics and administrative role

Pseudonym	Demographic characteristics	Administrative/support role
Melanie	White female, 50s	Central Academic technology support
Astrid	White female, 60s	Academic admin support and secretary
Alfred	Black Male, 40s	Faculty Administrator
Kerry	Black female, 40s	Senior Faculty Administrator
Ennie	Black female, 30s	Secretary – 4 years in current position
Adel	White female, 50s	Secretary – 1.5 years in current position
Francisca	Indian female, 40s	Secretary – 5 months in current position
Albert	Black Male, 30s	Academic support staff (teaching evaluations)
Maria	White female, 40s	Academic development centre
Lucia	Indian female, 40s	Admin and academic programme coordinator (Postgraduate)

From the analysis of the interviews, nine themes emerged which are discussed below from most to least prominent.

Process flow
This theme pertains to references made by participants about different systems and processes followed at the institution. This theme was most prominent in participants' answers, and is divided into five sub-themes in order to provide a more structured description of the different processes and systems that cause frustrations. Participants clearly expressed frustration at specific areas within the University such as the Finance and approval system and Human Resources Department. This clearly indicates problems with co-creations amongst stakeholders in the system.

Sub-theme 1: Frustration at the time it takes to get approval
On numerous occasions participants made mention of the time consuming process to obtain approvals for aspects such as quotations and flights. Frustration was in particular expressed with the delay that these approval systems cause on the individual's ability to meet their own deadlines and to appear as competent in doing their job. The following provides a quote from a participant expressing the length of the process.

"If my boss had to travel somewhere, I have to source the flight quote or accommodation...and we fill in a form...it goes to the secretary, from the secretary to the head of school...it goes to the accountant, then to the dean...it's that process there.." [Lucia]

Sub-theme 2: Frustration with established process and role-players in the chain

Further frustration was expressed in terms of those individuals in the system that seemed unresponsive to requests and that have to be contacted repeatedly before a response is received. Underpinning this sub-theme and the frustrations experienced are the following quotes from participants.

"I don't know whether people are ignorant or what, you would ask for something and it's not done. You need to force people to do their jobs. It makes my life miserable, because I need to do my job and it makes my job...It makes me feel inefficient." [Ennie].

"... meeting my deadlines is dependent on them meeting theirs too...its not easy to meet deadlines...one has to continuously remind them...do a lot of follow ups" [Kerry]

"And then you get problem areas where I just keep sending mails...I mail that person like a pest until I get a response." [Astrid]

In addition to the above, participants clearly expressed a lack of consistent and clear communication when changes or new procedures for established processes are rolled out. The following two quotes express the frustration participants experience due to this lack of communication with changes in processes and the role-players involved in the process.

"...nothing has been done about it...and people are sitting with old laptops...I was doing laptop purchases and they changed the system...but they didn't communicate it to all staff members" [Ennie]

"We feel the workers on the ground...people feel that the faculty just makes decisions, they don't think it through, and it affects us directly, its not practical." [Astrid]

Sub-theme 3: Financial systems and approvals

Participants expressed their frustration and concern at the length of the finance approval system; the response time from people working in the finance department as well as the length of time taken to pay suppliers. Quotes that emphasize this include:

"...I started getting copied in things that... where payments had to come through but was sitting in the system for a while...and I couldn't understand if a payment came through...it's like having to tell people, listen I need you to transfer monies now, because there is an impact on my students..." [Lucia]

"Another is the procurement section...I think they don't have enough staff or too much work...they are just not delivering often. They are slow. "..I struggle to get publishers paid...so I'm getting this hate mail... but it's not me." [Melanie].

"It takes time to pay the people...and I feel sorry for those people who are waiting for their money." [Adel].

Sub-theme 4: Human Resources (HR) systems and approvals

A large concern with the HR department included the response times for approvals for positions such as tutors (accompanied by the payment to be processed with the post approval), and with the resultant pressures on departments and systems due to the length of time taken to both advertise and fill positions. Participants shared the following quotes:

"It has been interesting, as some interactions with HR have been responsive, others not – especially when it comes to things like tutors payments" [Maria]

"Especially the HR department...concerning new appointment, academics – we are suffering. It's horrific. Really horrific. It just increases workload...They are incompetent in not streamlining or advertising positions. Not following up. It takes a very long time to fill a position...that kind of thing" [Astrid]

"HR...I don't know what the problem is, but HR is just not finding their feet. They are slow, they make a lot of mistakes, I think that's one thing here that is not working." [Melanie].

Sub-theme 4: Venue booking systems and timetables

Participants explained that a new venue booking system was recently put in place, but expressed concerns that these systems removed responsibility from the venue and timetables department so that the individual department now need to make the booking. If there are thus timetable clashes (which apparently occur frequently even though the system is supposed to be electronic) or double venue bookings, there seems to be

no contact person to help or anyone to take responsibility for these events. Participants expressed the following views:

"…for example, I want to book a venue….there's a new system that they are using… you log into the system, and its not working, and you need that venue… and when it's working you process it, and its stuck with someone who is not processing it… I requested a venue three weeks ago… and I am still waiting for it…" [Ennie].

"Something not happening properly at another Department (timetables) impacts my workload…" [Astrid]

"They administer the process…which is good and well…but if you have a clash…who do you go to? They going to say you made the booking…you did not see the clash." [Francisca].

"it's a new online system…but sometimes there will be clashes and stuff…it's still new for me and those that need to approve it." [Adel]

Academics
The second main theme occurring from the data analysis revolved around support staff expressing frustrations in dealing with academics. Although participants indicated that this did not apply to all academics, a number made mention of one or two academics they have to deal with that conveys an attitude of superiority and to an extent a disrespectful attitude toward support staff. Support staff also expressed that they are often faced with a few academics in their department that are always non-responsive to requests and often need to be nagged and reminded to complete certain tasks. Academic staff in general are described as not fond of doing administrative tasks and are often complaining that certain tasks are not - or at least should not be - their responsibility. One participant described academics as being conformists – they merely do a task because they are forced to and have to, with little thought or reflection behind the reasons for the tasks, and that it is often difficult to get their buy-in to a new system, process or method. Quotes supporting this theme include:

"They are the most difficult to deal with…academics…you send them emails and they don't respond…they don't read their emails…yet they expect you to perform miracles…" [Ennie]

"Whether a Prof, a doctor, and administrator…we are colleagues and that's how it should be…some people have these chips on their shoulders…there is maybe three people in this department that I know …that kind of speak down…but you get used to that…you learn to say no and stand up and say sorry I don't appreciate that, don't do that." [Astrid].

"I think the academic title is what drives many people crazy…one academic reminded me of the academic title, because I spoke to them without including it…they are also conformists…they do things because they need to get done…they wait for the last hour" [Albert]

Although many support staff experienced frustrations with academics, two participants expressed some compassion with academics' roles, stating that teaching is emotionally draining, and that lecturers have very high workloads.

'…but you got to look a bit wider…it's their workload. They have priorities as well and then everything falls in. With most of them I get good cooperation." [Astrid].

'Truth be told…academics are not easy to please…it take time to gain their trust and understand them…they complain about a lot of things they have to do…exams…research and are unable to cope with all the pressure which results in their admin lagging behind…" [Kerry].

Culture and age
The third main theme that came through refers to culture and age. In a few instances administrative staff referred to older staff members as being frustrating to engage with as they are often unwilling to innovate and to teach others and transfer their skills. Quotes underpinning this theme include:

"…or some are still stuck in the historical past…" [Albert]

"There's a sense of…you know…a racial dynamic…as to how people feel…there's people that have been working in the same job for 40 years or 30 years…they have a certain skill…but then someone comes in and has a better qualification, and they are treated as less…because the person in the position for 30 years does not want to hand over that skill." [Francisca]

In addition, this theme identified that to a lesser extent, mention was also made of the need for others to convey an accepting attitude towards different backgrounds and to demonstrate acknowledgement of tasks being done.

"Accept other people's background. Embrace each other. Know everyone's weaknesses and strengths. Support each other and work together in harmony…" [Ennie]

"…treat everybody fairly…because there are still some animal farm tendencies here…the ideal would be everyone would be equal…irrespective of their skin, because currently that is not the case…you are told about restrictions and whatever…but the same things are given to white people…" [Kerry]

Infrastructure and facilities

In terms of infrastructure (theme four), by far the largest number of complaints centred on the restrooms. Female participants complained excessively in the transcripts about the restrooms when asked to discuss infrastructure. In the majority of cases, these facilities are shared with students, as there are no separate restrooms for administrative and academic staff. Participants stated:

"So there is never soap and hand towels to wipe your hands, sometimes we do run out of toilet paper and that for me is a bit of a sticky area, because I mean its hygiene at the end of the day" [Maria]

"Cleaners don't do their job…the place is dirty. You go to the toilet…I don't know how many infections I have had, bladder infections." [Ennie].

"The toilets are hideous. The toilets are not sufficiently clean…and I think if there was more hygiene in the bathrooms we wouldn't get sick as often…" [Francisca]

"The bathrooms, it's horrible to use them….sometimes when you get visitors, you feel bad to take them to the bathrooms…it's horrible…not clean…and I think there's a lot of people who get sick from the bathrooms…especially the ladies…you need to be quick and go back to the office and its difficult there's a lot of people…it would be nice if there's a different bathroom for students and staff. I think there is more students than ever before in the entire history. It (the institution) wasn't built for so many students." [Adel]

In terms of infrastructure, some complaints were also raised about parking facilities, entrance booms not working and students then parking in staff areas. This applies in particular to the main campus of the specific institution.

"As staff you cannot find parking because students are parking in the staff parking…because the booms are not working" [Maria]

"It's a disaster…You find that students are using staff parking…and when you come as staff, you don't have parking. I'm supposed to be here at 8…but you find that I come here at quarter past 8 in my office, because I couldn't get parking…I feel like I lose that time. With operations…there is no leadership at all". [Ennie].

Budget cuts

The fifth theme centred on participants highlighting their awareness of the budget cuts experienced at the institution. This was most evident in their mentioning of the application for new computers for staff members, and battling with old computers. Quotes that support this include:

"…this laptop was giving me a problem…the cord wasn't working with the network cable…so it kept losing connectivity…I only got this sorted out in the last month since I came here." [Lucia].

"I have been struggling with computers and getting new computers for staff is like drawing blood…" [Francisca]

This theme came through depending on the position of the support staff. Mostly faculty administrators and only some general support staff expressed financial frustrations about experiencing continued extra workloads with no additional compensation. Faculty officers also expressed concern about workload associated with the particularly large faculty that they work in.

"the workload is too much…we getting this triangle where management is a lot of crooks getting high salaries and where people on the ground are not enough…" [Astrid]

"they pile us administrators with more load of work…and less money…and that is the problem… You get a senior faculty officer that earns the same as a senior faculty officer at another smaller faculty…is that fair?" [Kerry].

"..in the process the budget remains the same...we have more work...but operate with last year's budget."[Albert]

One participant explained that there are a lot of pressure on management in terms of the allocation of funds and that people don't always appreciate what is really going on.

"People don't always realize, that we too quick to complain about management...but there's a lot of those things that people are not thinking about...government is not subsidizing us properly...all the problems with not supporting students.... students not having food... millions spent for free e-books (to help students)...all of this comes from the university budgets." [Melanie].

Promotion and job variety
In terms of theme six – promotion and variety – there were differences in experiences depending on which position the participant fulfilled. For example, administrators in secretarial roles often expressed enjoyment in their roles due to the variety and the unpredictable nature of the day to day job, with little mention of promotional concerns. Specific quotes that support this include:
"I love admin, it's order and you can always make changes. I love it, I sit here and I do my job and everyone is happy and everything is under control, so I love it." [Ennie].
'I would say I like the variety of my job, there is a lot of stuff to do. I would hate just doing one thing." [Astrid]
"It's not mundane...you are not doing the same thing over and over...they should call us admin coordinators...not secretaries...we don't do much secretarial work" [Francisca]

On the other hand, those support staff in faculty roles however often expressed frustration about not having clear promotional routes. A particular concern was the fact that a lot of investment is made in developing a person in a faculty role, and once they've obtained the skills, the person leaves for another faculty or institution, as there is nowhere higher for them to progress in their current roles. This in turn also has workload implications. These participants expressed the following views:
"Academics have clear promotion policy which is something that they do not have for administrators and that is why we always lose staff...we can only promote staff when a senior position becomes vacant due to resignation or a member moving to another Department. "I have an admin assistant who has been in one position and not been able to move to a Faculty officer position...as there is no vacancy. We develop these people...give them skills and have to lose them because we cannot promote them." [Kerry].
"It is very difficult for support staff to get promoted..." [Melanie]
"They need to have like a promotion plan for support staff...or non-academics...unless you apply for another advertised position...there is no other plan..." [Alfred]

Time periods and workload
The seventh theme that emerged pertained directly to higher workload at certain times and can be linked to the budget cut theme. It was evident, in particular from faculty officers, as well as from participants dealing with the faculty directly on a regular basis, that there are certain times of the year when the work pressures, loads and deadlines are immense and that this causes high levels of stress with other stakeholders and potential resignations. Participants stated:
"Even when it was only the faculty...we had the same problem...too little people and not enough people...and too much work...that is why a lot of people left there...and later on it just became worse..." [Astrid]
"but our job...when it comes to applications...there is a peak time...and work with other colleagues to manage the process...some of our tasks overlap...and time management becomes very important...if there is a need, I come in on Saturdays. I don't get paid overtime, but I come on Saturdays. It gets to you when time is overlapping...then you need to realign your time...applications coming in and exams running...these life cycles overlap" [Alfred]
"It's the way the university is structured...I would have a cool off period where people don't request evaluations...and then 1-2 weeks before the deadline, everyone sends requests...it tends to stretch us a bit..."[Albert]
"...sometime we have many things to do around the same time...sometimes you miss lunch and you try to do everything..." [Adel]

Students also visit the faculties more regularly at certain periods of the year (exam time, registration time). A problem with frequent student visits seems to include that students do not understand the hierarchy of the system and therefore visiting the faculty in instances where they should be visiting a home department or specific academic.

"They don't know that lecturers report to the HoD…so they think they report to me…and so when they are not happy, they report to me and I have to direct them to the right person and tell them that…and only after they have had no joy with anyone they go to the dean." [Kerry].

Students

In the majority of cases, administrators are exposed to dealing with students. Some more than others which led to the identification of theme eight. The majority of participants indicated a sense of compassion toward the students, an appreciation for student challenges, sympathy for their problems, and willingness to help and serve the students to the best of their abilities. Some quotes that support this include:

"I love working with students" [Maria]

"When they leave my office…I make sure they feel special…I give them that there is somebody who cares…" [Alfred].

"Oh I love the students! I think they keep you young. I think I understand them, because I have kids that age…you sometimes think they have problems at home and you understand that …you try and help them…at the end of the day, students are clients" [Adel].

Management

The final theme identified in the transcripts are centred on one stakeholder – management. The majority of participants commended their managers for having an attitude of openness, accessibility, willingness to listen to recommendations and for being available and accessible and making staff feel valued. Specifically, participants indicated:

"All I want is a bit of value, to feel valued and that I contribute. If you undermine me, then you know what…it becomes very difficult to be happy in a place where you might feel…what value do I bring?" [Maria]

"I do have a good relationship with my line manager…and that makes it easy for me to please my subordinates." [Kerry].

"She (HoD) is very good. And you can go to her with anything. It's an excellent relationship." [Astrid].

"I'm treated as a human being…not as a machine…there is always a willingness to explain stuff" [Fancisca]

A few participants expressed concerns in terms of acknowledgment, their ideas not being considered or if they are not consulted as someone who is supposed to be the most knowledgeable on something. Some quotes that depict this include:

"…my voice is zero…I can complain to the HoD…which takes it up to the HoD meeting…where the decisions is made…and then they complain to the dean or the director…" [Astrid]

"All we want is a bit of value and to feel valued and that we contribute, if you undermine me, then you know what…it becomes very difficult to be happy." [Maria]

5. Discussion and Recommendations

The identification of nine themes from the data suggests the complexity and the many stakeholders and processes that support staff at this specific Tertiary institution engage with (Nenonen *et al.*, 2015). In reviewing the results, the largest theme "process flow" in particular confirms that many of the interactions in this Tertiary institution's processes do not follow a rational process (Koopmans, 2016), and that numerous delays, due to the involvement of multiple stakeholders cause backlogs and delays which result in staffs frustration and prolonged service delivery. These processes included general management approvals systems, role-players in the systems that are unresponsive, financial approval and payment systems, HR systems pertaining to approval of and making of staff appointments and venue booking systems. It is evident from the findings that these delays, in the processes cause heightened emotions and frustrations in support staff (e.g. continued requests from suppliers about their payments), and that certain delays have a potentially more severe long term impact on the system – e.g. workload problems in the case of slagging with staff appointments and poor service delivery which causes additional problems.

The second theme pertaining to academics is supported by previous research by Rothmann and Essenko (2007). The authors state that support staff often deal with conflicting pressures with multiple stakeholders, which includes academics. Complaints here mostly centred on the manner in which academics treated support staff, as well as being unresponsiveness to tasks, thereby causing negative emotions amongst support staff and delays in the system. In a previous study by De Meyer-Heydenrych and Stiehler-Mulder (2018), it was found that academics experienced feelings of immense workload pressures and often complained about inefficient administrative functions and not being clear on which administrative duties they should be taking responsibility for, based on what their core job description are. With regard to the delayed responses from academics and the reluctant attitude towards administrative duties, academics' workloads might therefore be a contributing factor to this behaviour. The third theme – culture and age - although not mentioned by all participants as equally challenging, should be appreciated as a dynamic of the country's history and current efforts to stimulate integration and to uplift and upskill previously disadvantaged communities (Hornsby 2015), and will remain an ongoing challenge that affects all activities if not addressed with the needed leadership and sensitivity.

The fourth and fifth themes of budget cuts and infrastructure and facilities mostly highlighted the states of the restrooms, the general cleanliness of the institution, parking facilities, technology (e.g. obtaining new computers) and increased workloads without additional or increased remuneration. These themes are a possible direct result, which is becoming a symbol of the challenges that Tertiary institutions in South Africa are facing, due to reduced government funding (Hornsby, 2015; Mampane & Omidire, 2018:1) and university pressures to reallocate its funds to other more pressing priorities such as student support. This challenge is supported in a comment made by one participant explaining that staffs do not always understand the pressures that management is faced with and how many additional expenses – e.g. student support and paying for learning materials, universities are faced with.

Promotion and job variety, the sixth theme, provided some interesting insights. Those support staff who experienced many challenges and variety in their role seemed very positive and happy, and made little mention of promotion needs, whilst those who were in more specific support roles with clearly specified duties, conveyed a stronger need to have a clear promotional path and opportunities. The latter group of participants also complained most about increased workloads, which, in referring to the seventh theme of time-periods and workload, suggests that particular time-periods caused increased stress and even resulted in some resignations, and could therefore be a contributing factor to this need for acknowledgement in the form of promotional advancement. Perceptions of unfairness may lead to physiological stress and sickness, which may increase absenteeism and potential job accidents, and should therefore be acknowledged as an important role player in employee performance and behaviours. It is also argued that justice in the workplace could be a stronger predictor of behaviours such as intentions to resign - the application of justice in the workplace is therefore an important aspect to be considered (Lemons & Jones, 2001).

The last two themes – students and management were both mostly positive in nature. It was evident that support staff were well aware of students' challenges and often times challenging circumstances and that this resulted in treating them with compassion. Interestingly, despite the workload and promotional complaints, which one would assume to an extent would reflect on attitudes towards management, staff indicated that management had a very open and positive attitude and were approachable. They did however highlight the importance of being consulted and acknowledged for their skills at times. Management's role is a strength that could potentially be leveraged to improve other areas of concern. Figure 1 below is a visual representation of the themes and serves to demonstrate the different tasks, system engagements and challenges that support staff encounter, and are faced with on a daily basis. Those engagements that have either a predominant positive (+) or negative (-) effect, or both (+/-), are shown to provide a clearer picture of what support staffs' daily encounters and challenges include and the resultant impact.

Figure 1: Support staff system engagements
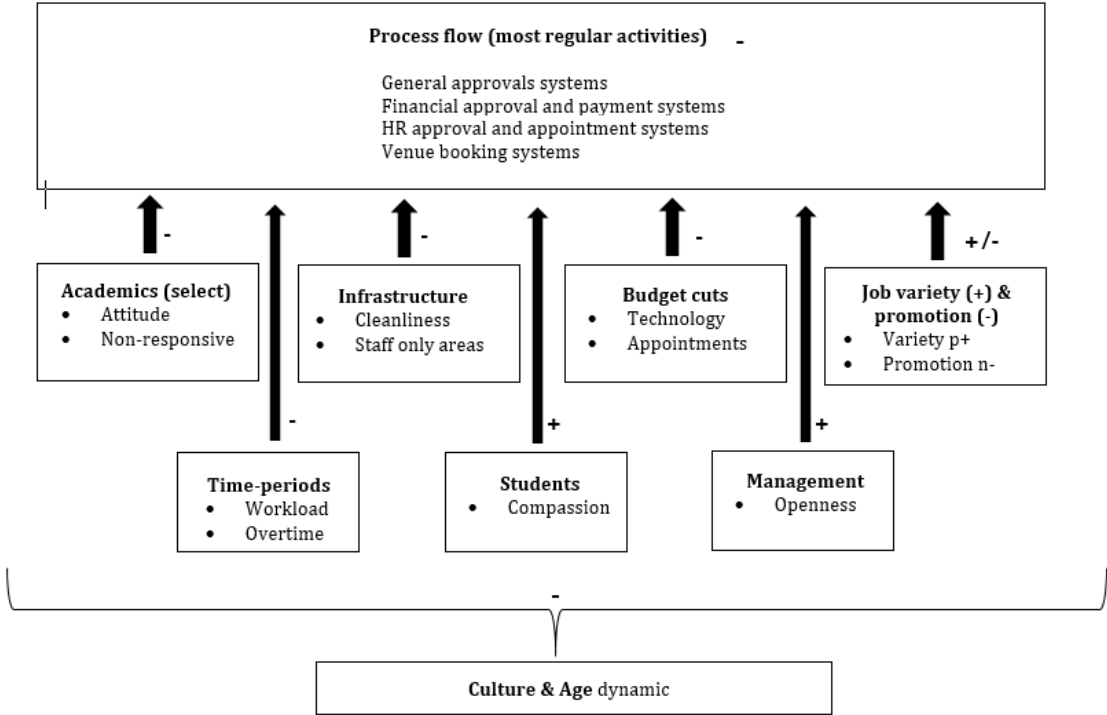
In reviewing the above activities and encounters as per Figure 1, and in an effort to propose improved system flow and functioning, as well as to identify areas where positive co-creation may take place, the following recommendations to management are proposed to ensure the effective functioning of the Tertiary system:

Process flow (-)
- Relook approval systems and assigned responsibilities of different mangers in the system in an effort to reduce the number of approvals that need to take place. Clear guidelines, responsibilities and consequences in terms of efficient, ethical and responsible approvals need to be developed and more responsibilities given to lower level managers thereby reducing the number of parties and approvals in the chain. Engage with support staff to obtain ideas as to how to reduce these processes.
- Revise the Financial and HR systems and identify areas where a possible additional staff component is needed, where internal approval chains may be too long and where new systems or methods need to be implemented in order to speed up turnaround times pertaining to payments and appointments.
- Consider internal annual staff service rating systems that are linked to team performance bonuses.
- In an effort to instil a collaborative attitude between stakeholders in the different chains and to thereby co-create value, consider including collaboration and co-creation as a KPI in employee performance agreements where employees need to provide evidence of collaboration and co-creation in the system that they work with and how they have contributed to improving these as well as the effective functioning of the system (this can apply to all stakeholders – administration, management and academics)
- Many tasks are repeated or added to another workload – identify where there are inefficiencies and overlaps and streamline the process to reduce workload and inefficient systems.

Academics (-)
- Although not all academics were described as treating staff with a superiority attitude, academics need to be cognizant of the multiple roles and functions and important tasks that administrators play and treat them in the same fashion as they expect to be treated and acknowledge and appreciate the role that administrative staff play - this also links through to the culture and age theme (see below)
- The institution should review academic administrative tasks and provide greater clarity in terms of which areas academics need to take responsibility for and which not

- Admin support numbers in departments should also be revised and where needed budget allocated to increase the support staff component in those cases where administrative duties potentially severely impact on lecturer output in terms of their core functions of teaching and research

Culture and age (-)
- Consulting the institutions own anthropoly department to develop a short learning course or host a session on workplace culture and dynamics to better educate staff to be sensitive and to and better understand age and cultural dynamics should help to improve on this particular challenge
- More opportunities for staff members to interact on social levels should also be created in order to better learn from and get to know one another

Infrastructure and facilities and Budget cuts (-)
- Budget allocations need to be revised to ensure that all stakeholders have the best equipment (such as computers) to work with and improve daily staff environments. Policies could be implemented such as allocating a certain percentage of additional income streams generated by the Tertiary institution being allocated for hiring additional support staff for peak periods, to build additional or allocate current restrooms to staff only and employ additional cleaning staff, and provide equipment and supplies.
- Ensure that budgets include a "maintenance" section that ensures that technologies such as for entry and exit (booms) are updated and in working order and where basic facilities such as restrooms are kept in working order. Maintenance staff should also be motivated and evaluated accordingly on their responsiveness to address issues that arise

Job variety and Promotion (+/-)
- Management of the Tertiary institution needs to work with support staff to identify ways to increase job variety and complexity to increase job satisfaction and to determine clearer promotional paths for administrators

Time-periods and workload (-)
- Through systems thinking and networking theory identify the major activities that overlap and happen simultaneous during particular periods of the year and revise and restructure those activities that could be moved to different time periods and due dates in this way reallocating resources to different activities.
- Justice should be regarded as an important contributing factor to employee behaviour and should be demonstrated by supplying additional support and assistance during peak periods.
- Faculties may consider developing large service boards that can be displayed in the faculty entrance to guide students to where they need to be, to answer some of their smaller questions they might have and so to help them understand where they should go with their requests – thereby helping to stream student visits better and reducing staff interruptions

Students and Management (+)
- Linking back to the themes of process flow, managements' openness and positivity toward staff could be used as a strength in enhancing communication levels. For example, new systems that need to be implemented could firstly be assigned and explained to managers who then convey and clearly explain the new system and process to support staff to ensure that the reasoning behind changed systems are clearly understood and therefore better supported.
- Management should also be encouraged to consult internal staff before asking external opinions and should focus on applying listening and acknowledgement when dealing with employees

Limitations and Future Research
This study is not without its limitations. This study was only conducted at one Tertiary institution among staff from one Faculty. The study also did not consider the interactions of other stakeholders with support staff. Although experiences from support staff were assessed, the external environmental changes such as those of lower Governmental funding for Tertiary institutions or the requirement by Government to insource cleaning and other support staff as not considered in the interview guide. Based on these limitations, further research should be conducted to consider the experiences and interactions of all support staff at the Tertiary institution as a whole (and other institutions) as well as the impact of Government policy on the functioning of the Tertiary system should be conducted.

Conclusion

The results of the study clearly indicated that support staff play a vital role in the functioning of the Tertiary institution and work with many stakeholders within the system, but they experience high levels of frustration as part of their jobs. This can mainly be attributed to the lack of communication, systems thinking and networking theory applied at the Tertiary institution. In order to improve the levels of job satisfaction and efficiency amongst support staff, it is essential that the Tertiary institution needs to implement systems thinking and service design in order to co-create value. This will require that all stakeholder experiences as well as policies and processes be reconsidered from a systems viewpoint and utilize all resources within the network for effective, efficiency and a more streamlined process. This will then allow for co-creation to occur amongst all stakeholders and within the system leading to a more competitive and self-sufficient system which could also assist in creating solutions for complex African problems.

Acknowledgement

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Paper 31

Predicting entrepreneurial intentions from entrepreneurial self-efficacy and entrepreneurs' personal characteristics: A Botswana perspective

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Abstract: Research has shown that the promotion of entrepreneurship in tertiary institutions is now viewed as a seedbed of innovation, employment creation and economic growth. In order to extend the literature on entrepreneurial intentions, this study focuses on the exploration of the nexus of relationship between entrepreneurial intention and entrepreneurs' personal characteristics in the context of the need for achievement, locus of control, self-confidence, and risk-taking propensity among Batswana youth. This study was underpinned by the Theory of Planned Behaviour and the Social Cognitive Career Theory, based on a descriptive and explanatory research design among the sampled 520 tertiary students with 500 questionnaires fully complete and returned for further statistical analysis. The major findings of the study indicated that entrepreneurial self-efficacy is significantly and positively associated with entrepreneurial intentions; the need for achievement is significantly and positively associated with entrepreneurial intentions, while locus of control and risk-taking propensity are significantly and positively associated with entrepreneurial intentions. This study had limitations to the extent that it only focused on university students (education sector), whose recommendations may not be generalized to other sectors of the economy. However, the paper offers practical and managerial implications for Botswana policy-makers by providing a strategic direction and environment that will help facilitate youth empowerment and resourcefulness in an era of environmental munificence and entrepreneurial orientation.

Keywords: *Entrepreneurial intention, locus of control, self-confidence, need for achievement, risk-taking propensity*

1. Introduction

In an effort to inculcate, nurture and support entrepreneurial intention, the Government of Botswana created the Small, Micro and Medium Enterprises (SMMEs) policy of 1999. This policy created a platform for the establishment of a Financial Assistance Policy, that is, the Citizen Entrepreneurial Development Agency (CEDA), Youth Fund and Local Enterprises Authority (LEA), all aimed at creating an integrated SMME support environment in Botswana. However, in spite of policy level interest/institutional support for entrepreneurial orientation, mainly among the youth that constitute 60% of the population, the effort has not yielded the desired consequences with respect to youth empowerment in entrepreneurial orientation in the Botswana context, taking into consideration that the overall rate of unemployment in Botswana was over 18.10% in 2017 (Trading Economics, 2018).

Based on the aforementioned, the study on the nexus of the relationship between entrepreneurial intention (EI) and entrepreneurs' personal characteristics in the context of the need for achievement (NA), locus of control (LC), self-confidence (SC), and risk-taking propensity (RTP) mainly among the youth between the ages of 18-35 years remain acute/lacking in Botswana. This study is thus motivated based on the premise that the overall unemployment rate according to Trading Economics (2018) is 18%, with the majority of the unemployed being youths between the ages of 18-34 years. Lekoko, Rankhumise and Ras (2012) thus concluded that the entrepreneurship education is vital for creating an enabling environment for entrepreneurial competencies, attributes and behaviours, all of which create a foundation for economic growth of any country. The assertion espoused here resonates with the determination of Botswana policy

makers to transform its economy from mineral led to a knowledge-based society, all in the spirit of self-reliance, ingenuity and creativity.

Based on the aforementioned, the overarching purpose of this study is centred around how selected entrepreneurial related personality traits such as NA, LC, SC and risk-taking propensity (RTP) as well as entrepreneurial self-efficacy (ESE), influence entrepreneurial intention (EI). Findings of the study are expected to lead to a better understanding of the role of EI and ESE and to what extent they influence EI and entrepreneurial action (EA), especially among the youth between the ages of 18-35 years. This study thus makes a number of contributions to literature on entrepreneurship. Firstly, this study extends the extant literature on self-efficacy in the field of youth entrepreneurship by explicating predictors of youth entrepreneurial characteristics, ESE and EI in Botswana. Secondly, the current study conducts research within a homogenous sample of the youth in Botswana with the intention of understanding variations among Botswana youth as regards the nomological web between entrepreneurs' personal characteristics, ESE and EI as the country seeks to achieve a knowledge-based economy, bearing in mind that the youth constitute 60% of the country's 2 million population. Therefore, this study is expected to assist policymakers in crafting and implementing more effective youth-sensitive government policies, especially as unemployment among the youths is around 35.67% (World Bank, 2018).

2. Theoretical Framework

Thompson (2009) and Wang et al (2016), defined an entrepreneur as a person who will set up a business venture sometime in future. Krueger Jnr (2007) thus posits that behind EI lie entrepreneurial characteristics, attitudes, mindset or dispositions. Knowledge processing based on entrepreneurship literature, argues that an entrepreneur's decisions to take part in entrepreneurial actions such as new venture creation are based on their intentions which are influenced by their perceptions as contented by Simon and Houghton (2002). Zindiye and Roberts-Lombard (2012) argue that the SMME sector is globally playing a critical role in the development of economic growth, the creation of employment, as well as securing an improvement in the standard of living of many people across the globe. They further argue that through a stronger focus on SMME education, even at higher education level, the large unemployment rate in developing markets can be reduced. Fatoki, Herbst and Roberts-Lombard (2010) concur and state that SMEs are also important in stimulating innovative thinking. They argue that the contribution that SMMEs make to both the private and to Gross Domestic Product (GDP) is important to reduce future unemployment in the developing world. Self-employment or entrepreneurship has been adopted in many countries as a strategy for promoting employment creation, tackling unemployment and household poverty, as argued by Falco and Haywood (2016) and supported by Karimi *et al.* (2017). Furthermore, Vogel (2015) opined that the world, more specifically Botswana, is facing an unemployment crisis mostly among the youth population which explicates the need to intensify entrepreneurial promotion efforts. Based on the aforementioned, this study seeks to investigate the nomological web between ESE, characteristics and EI, based on the platform for stimulating EA among Botswana youth.

Following the consensus that entrepreneurship is good for any economy and individuals (Karimi et al, 2017), especially the youth, most studies have focused on testing the applicability of the Theory of Planned Behaviour (TPB), as postulated by Ajzen (1991). However, the extent to which entrepreneurial characteristics in the context of NA, LC, SC, RTP, ESE and EI translate into enterprise or EA among the youth in Botswana, is not known. As established by Kreiser, Marino and Weaver (2002), many studies of entrepreneurial motivation have examined personality traits of entrepreneurs whose results are mixed and inconclusive. However, there is an acute/paucity of studies that have looked at the nexus of the relationship between ESE, characteristics and most especially in emerging economies, such as Botswana. Kirkley (2017) thus posits that the establishment of an entrepreneurial ecosystem cannot be achieved only by introducing entrepreneurial education. They further noted that the strategy for successful cultural adaptation to entrepreneurial orientation lies in engagement, inclusion, knowledge sharing and institutional support across all community stakeholder groups. This argument is supported by Ledikwe, *et al.* (2019), stating that an understanding of entrepreneurship as a business science, enhances an understanding of its relevance and need in the economy, enabling the entrepreneur to more successfully deliver on customer needs as well, thereby enhancing

business success. Therefore, the statements espoused above provide parallel support for the need to transform Botswana from a mineral-led economy to a knowledge-based economy premised on the spirit of self-reliance and innovation (creativity), especially among the Botswana youth. Furthermore, this study seeks to test the applicability of the TPB Entrepreneurial Model (TPBEM) as postulated by Krueger and Carsrud (1993) and the Social Cognitive Career Theory (SCCI), as posited by Lent et al (1994).

The TPBEM, derived from TPB (Ajzen, 1991) is based on the assertion that any behaviour depends on effective planning, hence intentions are shaped by subjects' attitudes towards behaviour, subjective norms and the subjective perception of behavioural control. The SCCI emphasizes that enterprise development is influenced by cognitive individual metrics such as self-efficacy, outcome expectations and goals/intent as postulated by Bandura (1986).

Theoretical Model Development
Self-efficacy has theoretical and practical implications for entrepreneurial success. Thus, creating a new venture requires relevant skills and competencies as contented by D'Intino and Kickul (2005). De Noble, Jung and Ehrlich (1999) cited by D'Intino and Kickul (2005), thus identified six theoretical perspectives of self-efficacy orientation which include risk and uncertainty orientation, management skills, innovation and product development, interpersonal and networking management attributes, as well as opportunity for procurement and disbursement of critical resources in the development and maintenance of an innovative ecosystem.
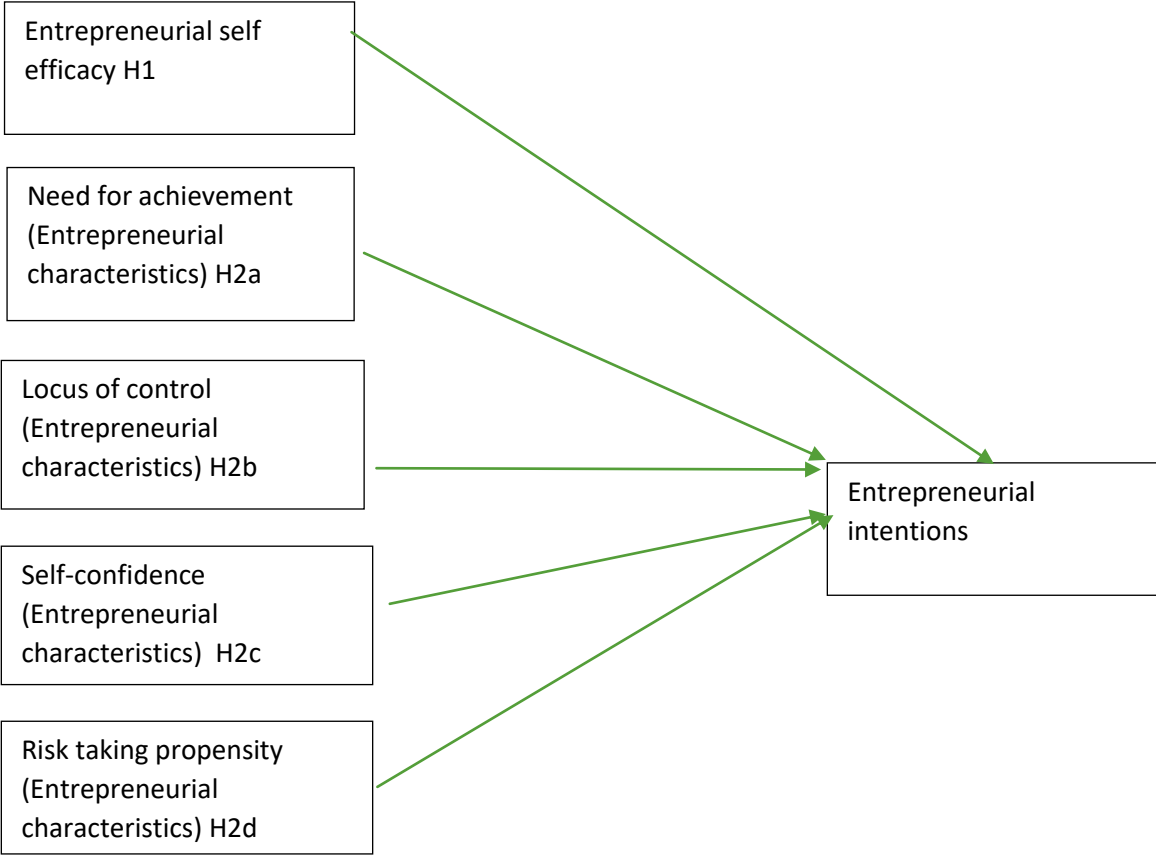
Nexus of Relationship between ESE and EI
Self-employment or entrepreneurship has been adopted in many countries including Botswana as a strategy for tackling unemployment and household poverty as concluded by Karabulut (2016) and Falco and Haywood (2016). However, the extent to which ESE, characteristics lead to EI among the youth in Botswana is not known, hence the justification for this study in Botswana. In the TPB, intentions refer to the readiness to

engage in a given behaviour (Ajzen, 2011). Thompson (2009) thus posits that EI refers to the readiness of individuals to establish a business venture. Xiao and North (2017) and Huq and Gilbert (2017) concluded that informal entrepreneurship learning forums, such as role modeling, learning from entrepreneurial parents/friends and interactive learning settings are not only important for enhancing ESE of prospective entrepreneurial means, but also explicate better outcomes for entrepreneurial students. We therefore hypothesize that:

H1: ESE is significantly and positively related to EI.

Nomological web between NA and EI

Psychological measures are presumed to be related to the creation of new ventures as postulated by Shaver and Scott (1991). NA or achievement motivation is perhaps the most widely cited characteristic of entrepreneurs, as noted by Shaver and Scott (1991). The pioneering work of McClelland (1961, 1965) posits that an ecosystem that demonstrates high level of achievement motivation will certainly produce proactive entrepreneurs, which sets a platform for economic development. Moore, Grabsch and Rotter (2010) thus contended that individuals who exhibit NA are motivated to work in circumstances in which they can have personal control, face moderate risks of failure and experience direct and timely feedback on their performance. Furthermore, Karimi et al (2017) contend that individuals with a high NA are more likely to manifest entrepreneurial behaviour than other individuals.

According to Linan and Fayolle (2015), the relationship between the entrepreneurial individual, EI and entrepreneurial action is established in extant literature. Rua and Oliveira (2018) thus postulate that an understanding of what facilitates or deters the establishment of a new organization, requires an articulation of how the entrepreneurial individual visualizes the opportunity to achieve it. Wilson and Martin (2015) thus established that EI doesn't always lead to entrepreneurial action (EA) as a number of individuals articulate EI, however, a few are able to initiate the action that enables the establishment of a new organization. We thus hypothesize that:

H2a: NA is significantly and positively related to EI among Botswana youth.

Relationship between LC and EI

Rotter (1966) defined LC as the degree to which one believes that activities are under one's own control (internal locus) or outside one's control. Furthermore, as noted by Jones (1997), the concept of LC signifies a generalized belief that a person can or cannot control his/her own destiny. Jones (1997) further noted that people who demonstrate control of events are said to explicate internal LC as they are convinced that achieving success or avoiding failure depends on their initiatives and actions, while at the same time people with external focus are of the view that success or failure in their lives emanates from uncontrollable forces. According to Ajzen et al (2009), intention is only materialized by individual commitment.

The Rubicon Model as postulated by Van Gelderen, *et al.* (2015), reflects that decision-making process is a four-step sequence from the initiation of intention to implementation, which involves selecting/adoption, planning, acting and evaluating. Peng, *et al.* (2012) thus noted that the EI of a person is a cognitive orientation which influences his/her choice of entrepreneurship. Based on the aforementioned, Campo (2010) states that ESE is the degree to which one is able to effectively start a new business venture. Bandura (1986) thus concluded that ESE is people's judgements of their capabilities to comprehensively articulate and execute courses of actions necessary to attain designated types of performance. We thus hypothesize that:

H2b: LC is significantly and positively related to EI.

Relationship between SC and EI

Entrepreneurs are individuals who have always been known to be self-confident (Chen, Green & Crick 1998). As noted by Moon et al (2008), extraversion illustrates people who are assertive, dominant, self-confident, energetic, active, positive, emotional and enthusiastic to some extent. Sledzik (2013) thus posits that self-confidence and innovative orientation have a direct influence on EI. Furthermore, Zhang et al (2019) argue that in some situations, entrepreneurs possess self-confidence in their abilities to perform the tasks that are required and necessary to initiate and run new projects/ventures. They are more likely to embark on those tasks and continue attempting to succeed in the given circumstances. Some scholars have argued that there is

a relationship that exists among risk-taking behaviours, self-confidence and one's EI. This view is supported by Herdjiono, Puspa Maulany & Aldy (2017) who posit that: the more an individual has confidence in her/his ability, the greater that individual's belief in his competency to influence the result and decision, and the greater the individual's readiness to try what other individuals perceive as risk. Based on the aforementioned, we thus hypothesize that:

H2c: SC is significantly and positively related to EI.

Nexus of relationship between RTP and EI

According to Brockhaus (1980), RTP has two major themes, one is related to prospect theory and the other theme holds the notion that risk taking is predispositional and trans-situational. Most studies in extant literature with respect to EI, took the second notion. Earlier studies by Zhao, Seibert and Hills (2005) confirmed that individuals who have a high propensity to risk taking were more comfortable in starting new ventures, thereby reducing the level of uncertainty in starting such ventures, as opposed to those individuals who were risk averse. Bezzina (2010) defined RTP as a tendency to take risk after making careful consideration and assessment of every situation thoughtfully, and crafting a strategy that minimizes the negative consequences of such risk. Bezzina (2010) further postulates that RTP has a positive and significant impact towards EI. Nunnally (2012), as cited in Xi and Liren (2017), postulates that risk appetite is one of the characteristics of entrepreneurial activities. Furthermore, in the view of Tang and Hull (2012), entrepreneurs normally exhibit some degree of willingness to undertake risks in the face of impending or probable opportunities, as opposed to procrastination. The above assertion is confirmed by Karimi et al (2017) who posited that entrepreneurship as a career has been found to be associated with risk taking and a high degree of uncertainty, which appeals to those individuals who exhibit a high degree of risk taking.

Chang and Chiu (2012) thus contended that risk-taking propensity refers to diverse individual intentions to take a chance, that individual intention to take danger or avoid danger could be used as a premise for decision-making, which is supported by Xi and Liren (2017). Risk appetite orientation has been defined by Chowdhury et al (2014) as referring to the risk-taking intention of employees. A number of researchers have confirmed that people who possess a high propensity of risk made faster decisions with the information available which will generally be limited; organizational members have been perceived to be risk-averse, but individual differences were noted (Xi & Linen, 2017). In a cross-sectional study on 200 young entrepreneurs in China by Xi and Liren (2017), the researchers found that a positive correlation existed between high-risk propensity and EI, as well as entrepreneurial performance, both financial and non-financial performance.

Studies by Karimi et al (2017) on 331 students from seven public universities in Iran confirmed a positive relationship between risk taking and EI. Individuals with a higher propensity to take risks have been found to be more comfortable in undertaking and creating new ventures as opposed to those who have a lower risk-appetite. Such individuals who have a higher propensity to take risks are more willing to accept any outcome in the pursuit of capitalizing on business opportunities that could have arisen. In view of the aforementioned, one can conclusively say that individuals who exhibit the propensity to take high risks in the face of both challenges and opportunities arising within a particular set-up, are likely to show significant signs of EI. We thus hypothesize that:

H2d: RTP is significantly and positively related to EI.

3. Research Methodology

A descriptive and explanatory research design was followed in this empirical study. The assertion espoused here is based on the need to explore an in-depth understanding of the extent to which entrepreneurial self-efficacy and entrepreneurs' personal characteristics will lead to entrepreneurial intentions as Botswana seeks to transform its economy from resource-based to knowledge-based, bearing in mind that 60% of the 2 million population constitute the youth. Data were collected from undergraduate students at both Limkokwing University and the University of Botswana. The unit of analysis focused on the youth as they signify the human capital for the realization of entrepreneurial orientation, as Botswana seeks to inculcate the spirit of self-reliance. The sampled respondents represented sampling units, and elements of the study focused specifically on the youth in order to explicate the nomological web between ESE, NA, LC, SC, RTP, and EI. A

total of 520 survey instruments were distributed and a total of 500 self-administered questionnaires were returned and analyzed, which represents a response rate of 96%.

The sample was selected using probability sampling technique. The survey instrument was administered to undergraduate students (third year and final-year students) at both Limkokwing University and the University of Botswana. The third and final-year students provide a penultimate pool for the realization of the spirit of entrepreneurial orientation. A random sampling technique was adopted since the sampling frame is known. The survey instrument included sections relating to the demographic profile of respondents and the constructs of ESE, Entrepreneurial Characteristics (EC) and EI which were adapted from Kolvereid and Isaksen (2006) and Tang and Chiu (2003) using a 5-point Likert scale. A five-point Likert type scale was used in order to discern the nomological web between ESE, EC and EI as indicated in Table 1. Validity of the research instrument was conducted in order to explicate the psychometric nomenclature of scale items for the subconstructs espoused in the empirical study. The internal consistency and validity of the scale items were tested with the use of Cronbach Alpha, Keiser Meyer Olkin (KMO) and Average Variance Estimates, all of which meets the minimum threshold as established in extant literature. Data were collected over a five-week period. The data was entered in SPSS21, and the descriptive, inferential statistics items measuring the subconstructs were explicated. Statistical techniques such as correlation and regression analysis were used to test the nexus of relationship in the research propositions.

Table 1: Constructs and items

Entrepreneurial Self-Efficacy (ESE)
X_1 I am not afraid of new challenges.
X_2 I can come up with new ideas and products.
X_3 I can work productively under continuous stress, pressure and conflict
X_4 I can set and achieve project goals.
X_5 I can network with others.
X_6 I can lead and manage a team.
X_7 I can manage time in projects.
X_8 I can identify creative ways to get things done with limited resources
X_9 I can effectively perform many different tasks.
X_{10} I follow instructions.
X_{11} I can take calculated risks.
X_{12} I have the ability to persist in the face of adversity.
X_{13} I have the ability to succeed with all my endeavours to which I set my mind.
X_{14} I can formulate a set of actions in pursuit of opportunities.
Entrepreneurs' Personal Characteristics (EC): Need for Achievement (NA)
X_{15} I am open to new ideas.
X_{16} I am not discouraged by challenges and negative feedbacks.
X_{17} I aim for excellence in everything that I do.
X_{18} I always try to learn lessons from my failures.
X_{19} I always set my mind to achieve set goals.
Entrepreneurs' Personal Characteristics (EC): Locus of Control (LC)
X20 I can determine my own destiny.
X21 I believe that the outcome of my actions depends on my performance.
X22 My success is influenced by my abilities and efforts.
X23 I am able to accept the consequences of my decisions and actions.
Entrepreneurs' Personal Characteristics (EC): Self Confidence (SC)
X24 My success depends on my ability that I can do it.
X25 I have the ability to achieve my set goals and objectives.
X26 I have confidence in my ability that I can carry out a project successfully.
Entrepreneurs' Personal Characteristics (EC): Risk Taking Propensity (RTP)
X27 I believe that higher risks are worth taking because they give higher returns.
X28 I am not afraid of investing my money on a business whose risk I have calculated.
X29 I prefer a low risk/high security job with a steady salary than a job that offers high risks and high

rewards.

X30 I prefer to remain in a job that has problems that I know about rather than to take the risk of working at a new job that has unknown problems, even if the new job offers greater rewards.

X31 I view risk on a job as a situation to be avoided at all costs.

Source: Adapted from Kolvereid and Isaksen (2006); Tang and Chiu (2003).

4. Empirical Findings

Demographic Profile of Respondents

Respondents ranges between 18 and 35 years of age. 58.2% were between the 16-20 years age bracket, while 37.2% were between the ages of 21-25 years. The remainder of the respondents were aged between 26 and 35 years. 17.6% were third year students, while 82.4% of the respondents were in their final year of study.

Reliability and Validity

The psychometric properties for the scale items for ESE, NA, LC, SC and RTP were tested to establish the reliability and validity of the subconstructs in this empirical study. The Cronbach alpha for EI, ESE, NA, LC, SC and RTP are 0.936; 0.919; 0.833; 0.818; 0.728, and 0.713 respectively. The factor metrics range for EI, ESS, NA, LC SC and RTP are: 0.584- 0.780; 0.572- 0.690; 0.525- 0.695; 0.676- 0.792; 0.752-0.833 and 0.712- 0.793 respectively. The AVE for EI, ESE, NA, LC, SC and RTP are 0.644; 0.568; 0.625; 0.744; 0.796 and 0.771 respectively. The KMO, AVE and factor metrics lend credence to the robustness of the factor structure in this empirical study, while the psychometric nomenclature meets the minimum threshold as established in extant literature, and these are highlighted in Table 2.

Table 2: Psychometric nomenclature of constructs measurement

Construct	Cronbach Alpha	KMO	AVE
EI	0.936	0.936	0.644
ESE	0.917	0.919	0.568
NA	0.845	0.833	0.6250
LC	0.882	0.818	0.744
SC	0.870	0.728	0.796
RTP	0.789	0.713	0.771

Source: Researcher's construct

Findings and Discussion

As shown in Table 3, ESE is significantly and positively associated with EI (r=0.371, p<0.01). Krueger (2007:124) thus posits that behind EI lie entrepreneurial characteristics, attitudes, mindset or dispositions. Furthermore, NA is significantly and positively associated with EI (r=0.298, p<0.01), while LC (r=0.269, p<0.01), SC (0.226, p<0.01) and risk-taking propensity (r=0.212, p<0.01) are significantly and positively associated with EI. Based on the aforementioned, Falco and Haywood (2016) opined that self-employment or entrepreneurship has been adopted in many countries including Botswana as a strategy for promoting employment creation, tackling unemployment and household poverty. Zhang et al (2019) thus argue that in some situations, entrepreneurs possess self confidence in their abilities to perform the tasks that are required and necessary to initiate and run new projects/ventures. They are more likely to embark on those tasks and continue attempting to succeed in the given circumstances. Bezzina (2010) thus postulates that RTP has a positive and significant impact toward EI as it involves crafting a strategy that minimizes the negative consequences of such risk.

Table 3: Correlations Explicating Association of ESE, NA, LC, SC, RTP and EI among Botswana Youth

		Correlations					
		Entrepreneurial Intentions	Entrepreneurial self- efficacy	Need for achievement	Locus of Control	Self-confidence	Risk taking propensity
Entrepreneurial intentions	Pearson Correlation	1	.371**	.298**	.269**	.226**	.212**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
Entrepreneurial Self-Efficacy	Pearson Correlation	.371**	1	.528**	.451**	.450**	.331**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
Need for	Pearson Correlation	.298**	.528**	1	.592**	.556**	.322**

Achievement	Sig. (2-tailed)	.000	.000		.000	.000	.000
Locus of Control	Pearson Correlation	.269**	.451**	.592**	1	.675**	.359**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
Self Confidence	Pearson Correlation	.226**	.450**	.556**	.675**	1	.391**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
Risk-taking	Pearson Correlation	.212**	.331**	.322**	.359**	.391**	1
Propensity	Sig. (2-tailed)	.000	.000	.000	.000	.000	
**. Correlation is significant at the 0.01 level (2-tailed).							

Source: Researcher's construct

The model summary in Table 4 also indicates that the predictors (Risk-taking propensity, NA, ESE, SC and LC) account for 15.2% variation in EI. The assertion espoused here is supported by the Durbin Watson value of 1.944. Xiao and North (2017) and Huq and Gilbert (2017) concluded that informal entrepreneurship learning forms such as role modeling, learning from entrepreneurial parents/friends and interactive learning settings are not only important for enhancing ESE of prospective entrepreneurial means, but also explicate better outcomes for entrepreneurial students.

Table 4: Model Summary Elucidating Nexus of Relationship between RTP, NA, ESE, SC, LC and EI

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.401[a]	.161	.152	8.33353	.161	18.918	5	493	.000	1.944

a. Predictors: (Constant), RTP (Risk Taking Propensity), NA (Need for Achievement), ESE (Entrepreneurial self-efficacy), SC (Self-confidence), LC (Locus of Control):
b. Dependent Variable: EI

Source: Researcher's construct

As indicated in Table 5, ESE (B=0.272, t= 5.378) is significantly and positively related to EI. Hypothesis (H1) is thus supported in this study. In addition, NA is significantly and positively related to EI (B=0.102, t=1.826). Hypothesis H2a is thus supported in this study. LC is also significantly and positively related to EI (B=0.86, t=1.435). Hypothesis H2b is thus supported in this study. However, the SC of the Botswana youth is not significantly and positively related to EI (B= -0.40, t= -0.678). H2c is not supported in this empirical study. Finally, the risk-taking propensity of the youth is partially significant and positively related to EI (B=0.73, t=1.583). H2d is thus supported. Moore et al (2010) thus contend that individuals who have NA are inspired to work in circumstances in which they have personal control over outcomes as they are exposed to moderate risks of failure and experience direct and timely feedback on their performance. Rua and Oliveira (2018) lend credence to the assertion espoused above by stating that to understand what facilitates or inhibits the establishment of a new organization, requires an understanding of how the entrepreneurial individual understands and perceives the opportunity to achieve it. Wilson and Martin (2015) thus established that EI does not always lead to entrepreneurial action as many individuals initiate EI, but only few are able to implement the action that enables the establishment of a new organization.

Table 5: Regression Results Elucidating the Nexus of Relationship between ESE, NA, LC, SC and RTP

Coefficients

Model	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	Sig.	95.0% Confidence Interval for B Lower Bound	Upper Bound	Correlations Zero-order	Partial	Part	Collinearity Statistics Tolerance	VIF
1 (Constant)	20.953	2.802		7.478	.000	15.448	26.458					
Entrepreneurial self-efficacy	.620	.115	.272	5.378	.000	.394	.847	.371	.235	.222	.666	1.502

Coefficients											
Need for achievement	.275	.151	.102	1.826	.069	.021	.571	.298	.082	.075	.541	1.848
Locus of Control	.271	.189	.086	1.435	.152	.100	.643	.269	.064	.059	.470	2.126
Self Confidence	-.162	.238	-.040	-.678	.498	.630	.307	.226	-.031	-.028	.486	2.058
Risk Taking propensity	.167	.105	.073	1.583	.114	.040	.374	.212	.071	.065	.803	1.246

a. Dependent Variable: Entrepreneurial intentions

Source: Researcher's construct

The summary of findings is presented in Table 6.

Table 6: Summary of Findings

H1	ESE/EI	*Supported*
H2a	NA/EI	*Supported*
H2b	LC/EI	*Supported*
H2c	SC/EI	*Rejected*
H2d	RTP/EI	*Supported*

Source: Researcher's construct

Contributions of study to scholarship

The study made a contribution that is both of a theoretical and practical nature. The findings of the study validate that the scales used to measure the hypothesized relationships between entrepreneurial self-efficacy, the need for achievement, locus of control, self-confidence, risk-taking propensity and entrepreneurial intention are both reliable and valid. The hypothesized relationships proposed have been validated, endorsing the B2C relationships between entrepreneurial self-efficacy, the need for achievement, locus of control, self-confidence, risk-taking propensity and entrepreneurial intention within a developing African market context.

In terms of the practical contribution, the study can assist entrepreneurial youths in Botswana with a greater understanding of entrepreneurial self-efficacy, the need for achievement, locus of control, self-confidence and risk-taking propensity which influence entrepreneurial intention. However, it should be noted that this outcome is dependent on whether entrepreneurs in Botswana perceive entrepreneurial self-efficacy, their need for achievement, the locus of control as well as their self-confidence in a positive light, whilst viewing risk-taking as a positive endeavour rather than an opportunity cost. As noted by Ratten (2014), entrepreneurship plays a significant role in job creation and socio-economic development. Therefore, emerging markets should secure more flexible education, funding and governmental support policies to stimulate entrepreneurial growth and employment creation. Through education, entrepreneurs can become more innovative and creative in their thinking, and by diversifying economic activities, governments in emerging markets can secure small-to-medium business success to sustain future economic growth.

From a theoretical perspective, the study made a two-fold contribution. Firstly, it was established that entrepreneurial self-efficacy, the need for achievement, locus of control and risk-taking propensity are positively related to entrepreneurial intention, while self-confidence is not positively related to entrepreneurial intention. Considering this, it can be argued that the theoretical constructs proposed to influence entrepreneurial intention, as hypothesized in this study, do predominantly also influence such intention from a Botswana perspective. It must be emphasized that little research on entrepreneurial intention has been done from a Botswana perspective, as a developing African market. The findings of this study are of critical importance as they inform the entrepreneurial community in Botswana of the factors that need to be considered when focusing on entrepreneurial intention. The different factors in the study to measure entrepreneurial intention could also be applied to measure entrepreneurial success, entrepreneurial

discourse or entrepreneurial development. Therefore, the study makes a significant contribution to entrepreneurial literature by proposing valuable measurement dimensions.

Finally, the study secures an improved consideration of the influence that entrepreneurial self-efficacy, the need for achievement, locus of control and risk-taking propensity has on entrepreneurial intention within the context of a developing market such as Botswana. Findings are communicated on how entrepreneurial self-efficacy, the need for achievement, locus of control and risk-taking propensity influence entrepreneurial intention differently. These results can therefore assist the government, government structures, NGOs, semi-parastatal enterprises, universities and private consultants in understanding how entrepreneurs can be empowered to secure both the improved success of start-ups, and the growth of existing entrepreneurial businesses in emerging markets (Bruton, Ahlstrom & Obloj, 2008).

5. Managerial Implications

Taking into consideration the results provided, as implications of the study, it can be said that entrepreneurial intention in emerging markets can be stimulated through a proactive, focused and productive educational policy that will empower youth entrepreneurs. Governments in emerging markets should create a culture of innovative thinking, that is founded on creative and independent idea generation and problem solving. This can be achieved by strategizing around three key pillars, namely:

A clear and focused framework where government departments can cooperate in an aligned manner to secure direction. Both national and regional government departments should be aligned in terms of their objectives to stimulate and enhance entrepreneurial intention through legislation aimed at the development of entrepreneurial thinking, already at primary school level. Children should be empowered, through opportunities at school level, to develop a positive mindset towards entrepreneurship by not being afraid of new challenges, being stimulated in class to think innovatively and being acknowledged and provided credit for generating new ideas, calculate risks and to develop different action plans in the search for opportunities. The stimulation of entrepreneurial thinking should be directed by government, legislated as such and managed professionally to secure a positive outcome in the long term. Such an approach will not only stimulate a positive entrepreneurial intention, but also secure that job creation is not solely the responsibility of government and the private sector. The reason being that small to medium enterprises will comprise of innovative business owners, contributing to the economy through product and service creation and employment generation.

Secondly, educational institutions (schools and universities) should be empowered with funding, tools and training to secure the development of a positive entrepreneurial intention. Educational institutions should be assisted to develop entrepreneurial thinking through curriculum development, focusing on innovative idea development, the development of a positive mindset that will stimulate the strive for excellence, the development of goals, and the understanding that failure is not always a negative outcome or characteristic. Bursaries can be allocated to schools for innovative idea generation, project proposal activation that secures success, the start of a new business venture, or studies in entrepreneurship at a university. In addition, teachers should also be trained in entrepreneurial intention and empowered to guide young scholars on how to work productively under continuous stress, pressure and conflict, and develop skills on how to network with others, the ability to work in a team and how to manage employees and finally, ideas on how to persist in the face of adversity.

Furthermore, universities should also ensure that entrepreneurship should be a compulsory module in all degree programmes. This initiative should be supported by a government-private initiative where experienced business people are nominated on university programmes to upskill students in terms of business practice and success. The creation of small business incubators, within an academic department or faculty, under the mentorship of a business entrepreneur, can contribute to the development of a positive entrepreneurial intention amongst the youth. The outcome of such incubator training could be to guide students and university academics on how the outcome of an individual's actions depends on his or her performance, how business success is influenced by individual abilities and efforts, how self-confidence can

drive business success, and that the investment of money into a business should be risk calculated. Therefore, entrepreneurial intention is guided by both external and internal factors related to an individual and should be understood and developed in that context. An understanding of these factors can assist entrepreneurs, training providers, government institutions and NGOs with the knowledge to develop an entrepreneurial generation that could achieve a greater business success in future.

Conclusion

The study explored the nexus of the relationship between entrepreneurial intention and entrepreneurs' personal characteristics in the context of the need for achievement, locus of control, self-confidence, and risk-taking propensity. The study concluded that entrepreneurial self-efficacy, the need for achievement, locus of control and risk-taking propensity are positively related to entrepreneurial intention, while self-confidence is not positively related to entrepreneurial intention. The study can provide guidance to the youth in developing markets on the factors that influence their entrepreneurial intentions. From a developing market perspective, it is proposed that a greater understanding amongst policymakers, educational institutions, NGOs and parastatals be secured on strategies to enhance entrepreneurial self-efficacy and the need for achievement amongst the youth in emerging markets. In addition, more research needs to be undertaken on the concept of locus of control and risk-taking propensity, and why the youth in developing markets perceive these two factors also as relevant in terms of their entrepreneurial intention. By conducting continuous research amongst the youth on entrepreneurial needs and wants, and through a well-developed and structured educational curriculum at educational institutions, a positive entrepreneurial intention will be secured, and entrepreneurial commitment will be strengthened.

The study is limited, since only selected antecedents of entrepreneurial intention were investigated, namely the need for achievement, locus of control, self-confidence, and risk-taking propensity. Despite this limitation, the study does provide relevant insights on entrepreneurial intention amongst the youth of Botswana as a developing market. Through an improved understanding of the factors that influence entrepreneurial intention, the Botswana government will be empowered to have a greater understanding of entrepreneurial intention.

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Paper 32

The Evaluation of Retail Business Management Student Creativity Levels at a Selected University in the Western Cape

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Abstract: Retail in South Africa is a dynamic industry that requires creativity as a critical skill to solve complex business problems, especially considering its impact on the Fourth Industrial Revolution. The South African Qualification Authority emphasizes the importance of creativity as a critical outcome for the National Diploma in Retail Business Management qualification by stating that graduates should be able to identify problems and creatively make responsible decisions to solve business problems. However, due to the diversity of creativity, higher education institutions neither commit in the evaluation nor the development of student creativity. Consequently, no formal structures exist to evaluate creativity which, in turn, results in the potential loss of skills development that influences divergent thinking, problem-solving, decision-making, the identification of new and unique business opportunities, and student self-reliance. Using the above as a basis, this study aims to determine the extent to which Retail Business Management students meet the specified critical outcome of creativity. Survey research was conducted by obtaining primary quantitative data from a purposively selected sample of Retail Business Management students enrolled at a selected university in the Western Cape. Stemming from the results, it is apparent that sampled students did not meet the required levels of creativity and no systems are in place to evaluate and develop the creative skills of these students.

Keywords*: Creativity, skills, retail, Fourth Industrial Revolution, education, evaluation*

1. Introduction

Creativity in education as a whole is gradually drawing attention in both developed- and developing countries. Creativity is "the production of novel, useful products" (Mumford, 2003) and "ideas" (Amabile & Pratt, 2016); it refers to the production of something that is "original and worthwhile" (Sternberg, 2011). The benefit of creativity lies in that it is the ultimate contributor to the progress of mankind (De Bono, 1992). All humans are inherently creative, particularly if creativity is considered as a problem-solving skill. Creativity is essential as it assists humanity in viewing problems and situations from an innovative perspective and developing creative solutions that do not depend entirely on past or current solutions. Creativity is increasingly viewed as a means to bridge the gap between where we were and where we want to be. Creativity is thus an essential requirement in business, and more specifically the retail sector as it not only transforms the way companies do business, but creativity in the retail business management provides a competitive advantage. Businesses thus see creativity as a critical success factor to succeed in the near to distant future. Consequently, creativity was included as a critical outcome in the National Diploma (ND): Retail Business Management (RBM) qualification as required by the South African Qualifications Authority (SAQA). Worldwide students do not meet the expected levels of creativity in solving business-related problems and are unable to utilize their existing knowledge in unfamiliar situations effectively (Robinson & Aronica, 2015). Thus, students do not challenge the status quo but stay within the safe parameters of the information obtained from textbooks or study material for addressing problem-solving situations. It seems that students have lost their free-thinking ability–the ability to be creative - as observed by the researcher through formal assessments, case studies, and class discussions.

Amabile (2017) further convened the importance of creativity for students by postulating that: "The world has long been fascinated by creative individuals – people who produce work that dramatically touches us aesthetically or advances our lives technologically".

Stemming from the above, a broad base analogy can be drawn that the creativity levels of RBM students are not on par with the anticipated SAQA outcomes as stipulated in the ND: RBM qualification, and consequently, their current knowledge and skills do not meet industry requirements. In order to succeed in the vibrant South African and international retail industry, RBM graduates need to be creative, especially during the Fourth Industrial Revolution (Industry 4.0)[7]. Creativity is a crucial skill required by retail business managers to succeed in the competitive retail industry. However, no existing set standard framework to gauge the appropriate creativity levels expected from RBM graduates exists within the curriculum. The objective of this study was, therefore, to determine the extent to which ND: RBM students meet the specified critical outcome of creativity as required by the SAQA. Research findings could aid in identifying the exact shortcomings in creativity levels of students.

Using the above as a basis, the following question can be asked: *"To what extent do the creativity levels of ND: RBM graduates meet retail industry requirements?"*
As no earlier studies have evaluated the creativity levels of RMB students in a South African higher education environment, this study aimed to test the following hypothesis:
H1: Creativity levels in sampled ND: RBM students meet the specific critical outcome of creativity in the ND: RBM qualification.

Relevant discussions in this paper take place under the following headings: 1) literature review, 2) research design, methodology and methods, 3) results and discuss, and 4) conclusion.

2. Literature Review

A brief overview of creativity and the Fourth Industrial Revolution
Creativity is a mental characteristic (a distinguishing feature or attribute of an item, person, phenomenon, etc.) that allows a person to think outside of the box which, in turn, results in innovative or different approaches to a particular task (BusinessDictionary.com, 2019). Creativity is "the act" and the "ability" that involve two processes of "thinking" and then "producing". It is about "passion and commitment" (Naiman, 2019) and is the "most important leadership quality for success in business" (IBM, 2010a). Due to individual interpretations, understandings, and applications of creativity, it means different things to different people. Although creativity is described and defined in many ways, there are two critical contributors to creativity, namely convergent thinking[8] and divergent thinking[9] as these are vital to the problem-solving experience of the creative process (Gomez, 2007). However, the creative process is incomplete when constraints exist in identifying possible solutions and evaluating the possible solutions. Therefore, the understanding and interpretation of the term "creativity" result in different attitudes, meanings, and definitions, especially in RBM environment.

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[7] The Fourth Industrial Revolution (Industry 4.0) is a state in which manufacturing systems and the objects they create are not simply connected, drawing physical information into the digital realm, but also communicate, analyze, and use that information to drive further intelligent action back in the physical world to execute a physical-to-digital-to-physical transition. In other words, Industry 4.0 makes it possible to manufacture entirely new things in entirely new ways and revolutionize supply chains, production, and business models (Sniderman, Mahto, & Cotteleer, 2016).

[8] Convert thinking emphasizes the "reproduction of existing data and adaptation of old responses to new situations in a more or less logical manner" (Gomez, 2007).

[9] Divergent thinking is characterized by the "flexibility and originality in the production of new ideas" (Gomez, 2007).

Retail is the fourth-strongest economic contributor to the South African Gross Domestic Product (GDP) (W&RSETA, 2017). The Wholesale and Retail Sector Education and Training Authority (W&RSETA) skills plan (W&RSETA, 2017) states that the Wholesale and Retail Sector (WR sector) employs 3.161 million people; this is 22 per cent of the total labor force in South Africa (Statistics South Africa, 2018). According to Statistics South Africa (2018), retail sales in South Africa increased, on average, 4.54 per cent per year from 2003 to 2018. This indicates that the South African retail sector is growing and vibrant; however, it is also rapidly changing. The W&RSETA (2017) warns about various changes that could impact on the sector in the near future. These changes include factors such as more empowered customers that use the Internet and social media to increase their product and business knowledge, as well as establishing their voices, the evolving retail landscape that resulted in skill shortages, and the rapid changes in technology advancement. These drivers are critical as the impact of the Fourth Industrial Revolutions (Industry 4.0) will accelerate changes experienced by the WR sector. Xu, David and Kim (2018) warn that the "speed and measure of the changes" resulting from Industry 4.0 are not to be ignored as these changes will cause shifts in power, wealth, and knowledge. The influence of Industry 4.0 on leaders and businesses across the world will enforce extreme business and societal transformations, resulting in a demand for new and transformed skills (Hanley, *et al.,* 2019).

Taking into account the above, it could be argued that during Industry 4.0, the productivity and performance of businesses depend increasingly on knowledge-based workers who can apply their intelligence and creativity in the work milieu. Therefore, the education and training landscape will have to change fundamentally. Industry 4.0 will change the future worker; the new type of worker will be required to be a knowledge worker that can use critical thinking, creativity, collaboration, and communication in a changing work milieu (Henning, 2019). Although many of the future scarce skills will be focused around new technologies, there will be a more considerable skills demand for human skills such as "creativity, originality and initiative, critical thinking, persuasion, and negotiation" (Davis, 2016). Davis (2016) emphasizes the importance of developing creativity, not only as a scarce human skill, but also to provide individuals with the ability to identify, analyze, and creatively solve the extreme expected changes they will face because of Industry 4.0. New technologies will cause 44 per cent of current positions to change drastically by 2025. The value of creativity is thus eminent for both individuals and businesses. It is, therefore, essential that the development of creativity is considered as a critical factor in both the ND: RBM qualification and the WR sector. This will ensure that students are adequately prepared to apply their creativity, intelligence, and skills to resolve the unique and novel business problems that the WR sector are currently experiencing due to Industry 4.0.

Creativity in education
Creativity has been in existence since the beginning of civilization, but how did it become such an imperative educational dynamic? Shaheen (2010) underwrites the link between education and creativity to the launch of the Soviet Union's Sputnik 1, the first human-made object to go into space on 4 October 1957. It was apparent that the Soviet Union won the space race, which was seen as the failure of the creative ability of Western nations' engineers. It was predicted by Wilson (2005), "several waves of creativity in education" will hit the world. The current wave can be attributed to the need for education to meet the demands of society due to the impact of Industry 4.0. Sir Ken Robinson (2006), author and international speaker on creativity, states that creativity is "as important in education as literacy" and that "we should treat it with the same status". He further sustains that transformation will be enforced on businesses which, in turn, will have an impact on existing and new professions during Industry 4.0. It is thus understood that creativity is a critical requirement across the world to enable countries to sustain their economies through higher employment levels (thus alleviating poverty). It could be argued that should South Africa be able to understand the importance of incorporating creativity as an essential inclusive educational contributor like in other first-world countries, it could greatly assist in building a resilient workforce that could lead to a decrease in the high unemployment rate in South Africa (Statistics South Africa, 2018). Furthermore, it is believed that through the effective development of South Africans' creative skills, South Arica can become a truly resilient and creative nation that can survive Industry 4.0 through its capable and creative human capital (Majola, 2019).

Wu, Wu, Chen and Chen (2014) explored the key factors affecting the creativity development of higher education students and found that "creativity is a very important and complicated concept". Wu *et al.* (2014) opine that "the improvement of quality management and the development of creativity" must be the two main directions higher education institutions should be heading toward in an attempt "to improve overall operational performance". They emphasize that educators should identify the real factors that affect student creativity, and once these factors are understood, the most appropriate, reliable, and suitable tool for measuring the creativity can be applied to measure creativity development. They further state that "creative thinking, critical thinking, and problem-solving abilities are all important basic qualities" for future businesses and that higher education institutions, generating scholars and intellects, should be "responsible for training creative individuals suited to the demands of today's society" (Wu *et al.*, 2014). Fields and Bisschoff (2014) explain that the purpose of higher education institutions lies beyond career preparation only as students should also meet future challenges and "contribute original thoughts to challenges in the workplace and society as a whole". Robinson and Aronica (2015) acknowledge how particularly first world countries, recognize the prominence of creativity in their education structures. However, the question remains whether these claims regarding the importance of creativity is prioritized and formally evaluated. Fjortoft (2018) states that one of the challenges faced by educational institutions and educators is the ability to prepare students to be creative as educators should use students' creative thinking as the basis for creative skills development that should be obtained through the development of assessment methods, like brainstorming, case studies, class discussions, and assignments. Students should be challenged to use divergent and convergent thinking to increase their creative thinking and optimize opportunities for more effective ways of accomplishing goals and objectives.

An important factor associated with creativity is the different assessment methods available for determining the creativity levels of the RBM students. Said-Metwaly et al (2017) found that although there are many different assessment tools for creativity, "numerous instruments to measure creativity can be found in literature. However, none of these instruments is without its limitations or can alone undertake the task of measuring the multifaceted construct of creativity". Maslow (1976) envisaged creativity as an aspect of human nature that is found universally in all human beings. In children creativity can be straightforwardly seen or witnessed, but he advocated that creativity seemed to be lacking in adults. Maslow detected two levels of creativity in people; primary creativity was identified as necessary for creative/novel discoveries, definite novelties, or ideas which advanced from what occurs at present time. The secondary creativity is a characteristic that researchers use for the incorporation of earlier researched work to establish new ideas. Both the primary and secondary creativity are of interest for this study.

Creativity in education: A developed country perspective
Arguably, one of the most significant influences for the inclusion of creativity in education came about in 1958, when President Eisenhower of the United States (US) signed the National Defence Education Act (NDEA) into law. This was a defining indication regarding the importance of creativity in education for the US government (United States of America Congress, 1958). Many countries have followed suit as the need to address the needs of a rapidly changing world, facing a growing uncertain future and economic changes, increased (Shaheen, 2010). Nations realized that in order to respond to these factors, they required an educated workforce. More recently, nations are faced with the pressing matter of unemployment rates, rapid technology changes, and Industry 4.0 (W&RSETA, 2017). Governments thus see the incorporation of creativity in their education systems as a key strategy to meet the demand for creative, knowledge-based workers. Florida (2014) states that "the only way forward is to make all jobs creative jobs, infusing … every form of human endeavour with creativity and human potential" and the only way this objective will be attained is to incorporate creativity in education. Many developed countries have successfully incorporated creativity in education and have found that its inclusion in education have provided students with more stimulating learning processes, enhanced stimulation and acceptance of the university culture, higher attention and preoccupation, higher and better targeted motivation (Edsys, 2019; Suciu, 2014), as well as improved communication-, emotional-, and social skills (Edsys, 2019).

Table 1 provides a summary of how various developed countries encompass creativity in their education structures during the past ten years (2010 – 2019).

Table 1: Creativity in education: A developed country perspective (Source: Author, 2019)

Country	Description
Australia South Australia Department of Education (2019)	Critical- and creative thinking are at the core of the Australian education system. Their objective is to ensure that learners become self-reliant and creative individuals through critical and creative thinking.
Canada Shaheen (2010)	The Canadian education system demarcates creative thinking as the most critical and essential learning outcome.
China OECD (2015)	Emphasis is placed on the moral, intellectual, and physical development of students. China aims at improving students' creativity and research capability, as well as helping students develop a sense of social responsibility through practical experiences. It improves their creativity and self-development to support them to achieve their full potentials.
France Blanquer (2018)	Emphasis is placed on the lower secondary education levels – an environment that breeds a taste for creativity in all learners need to be sturdily implemented.
Germany Schmidt & Pavón (2017)	The significant prominence of the German curriculum is on the improvement of children's creative aptitudes.
Hong Kong Tam, Phillipson & Phillipson (2017)	Creativity is comprehended as a higher-order thinking skill and is given "top priority" through the development of critical thinking, creativity, and communication skills.
Ireland Madigan & Doyle (2018)	Ireland developed a strategy for creative development in education called "Unlocking Creativity". They develop creativity through encouraging ambition, risk, innovation, and excellence by harnessing the talent and passion of all citizens.
Japan Smith (2018)	Japan initiated the "Yutori education model" that is shaped on a notion of "zest for living", through which children from a young age is given the freedom to develop individuality and creativity.
Netherlands Dutch Ministry of Education (2014)	Creative development is one of the primary principles of the Netherlands education system. There is an increasing emphasis on the development of pupils' higher-order thinking skills, creativity, scientific attitude, as well as research- and problem-solving skills, within and across disciplines. Pupils are increasingly encouraged to think about and reach a meaningful understanding of the world they live in and are thus more likely to become knowledgeable sources themselves. This cultivation of creativity goes beyond mere cognitive learning; it involves imagination, feeling and emotion, critical thinking, open-end solutions and space to experiment and cooperate.
Scotland Education Scotland (2013)	Creativity is viewed as the next major enterprise for society. Creativity is seen as a valuable skill in retail, education, health, government, and business, and has become an integral part of the Scottish culture.
Singapore Hogan (2014)	Singapore launched the "Teach less, learn more approach" with the primary objective to develop learners with enquiring minds, who can think critically and creatively. A strong emphasis is placed on the creativity, individual strengths, and social skills of learners from pre-school up to college level.
South Korea UNESCO (2019)	Creativity was integrated as a critical outcome since 2015 (to be fully implemented in 2020) through the cultivation of a creative and integrative learner. A "competency-based learning" method is used where learners experience flexible and creative learning.
Sweden	The Swedish National Development Plan states that education

Country	Description
Swedish Ministry of Education and Research (2016:18, 25)	should provide "the conditions for developing creative skills through addressing the individual need of pupils and focus on "multi-faceted personal development into active, creative, competent, and responsible individuals and citizens."
United Kingdom (UK) Wyse & Ferrari (2015)	Education in the UK emphasises creative skills development and is known for its creative elements such as their child-centred education system. The main objective of the National Curriculum is to enable pupils to think creatively and critically, to solve problems, and to make a difference for the better. This should allow pupils to become creative, innovative, and enterprising.

From Table 1 above, it is evident that many developed countries have identified the need and importance of incorporating creativity in their education systems. Many of these education systems focus on key factors such as the development of creative thinking and self-reliance, the all-round development of individuals, the intellectual and physical development of students, a holistic approach to human development, the growth of higher-order thinking skills, teaching students the skills to understand the world they live in, and developing creativity as an integral part of national culture. These factors are all crucial for the development of the new generation of creative knowledge workers required to overcome the effects of Industry 4.0.

Creativity in education: A developing country perspective

As early as 1991, UNESCO found that the best way for developing countries to achieve creativity is by "re-directing the institutional systems in education to creative approaches" (UNESCO, 1991). Although creativity has become an essential component in many developed countries, the topic seems to be neglected in developing countries. In developing countries, the non-existence of the integration of creative thinking skills in their curricula are a decisive blemish in their future positioning and realizing transformations in political-, economic-, and cultural areas (UNESCO, 1991). It can thus be argued that due to these pressing issues, developing countries are behind in terms of incorporating creativity into their education systems and funding earmarked to address these issues are not utilized for the development of creative strategies and -policies. This conclusion is confirmed by Winthrop (2015) who describes that when a comparison was made between developed- and developing countries in terms of an average number of years in school and levels of achievement, developing countries were about 100 years behind the developed countries. Furthermore, the education levels of the adult workforce in developed countries measured by an average number of school years, double that of their developing country counterparts. Winthrop concluded that it would take well over 100 years for students in developing countries to catch up to the learning levels of today's developed country students. It is believed that developing countries could leapfrog a few stages through the implementation of creativity and technology in education.

Table 2 provides an overview of research conducted in developing countries on how creativity is circumscribed in education from 2010 – 2019.

Table 2: Creativity in education: A developing country perspective

Country	Description
South Africa South African Department of Basic Education (2010); Ngozo & Mtantato (2018)	The South African education and training system should not only provide knowledge and skills required to the economy but should also contribute to developing thinking citizens who can function effectively, creatively, and ethically as part of a democratic society. They should understand their society and be able to participate fully in its political-, social- and cultural life. South Africa has the worst education system of middle-income countries that participate in cross-national assessments of educational achievement. South Africa spends more per capita on education than most advanced economies, yet the primary education system was rated 126th out of 138 countries for the 2016 – 2017 periods.

Country	Description
Egypt OECD (2015)	The Egypt education department has announced some drastic changes from the current education system, but no reference can be found on the inclusion of creativity as an outcome for education. The quality of education continues to be a stumbling block to optimise the full development of children's potential.
India American Society for Engineering Education (2017)	Higher education in India adopted programmes to support small-scale industries and to enhance design and creativity. However, India experiences educational challenges relating to a large number of students wanting to access education, inadequate funding, language barriers, and extremely high student-educator ratios.
Turkey Kizilçelik (2015)	Although creativity is discussed more frequently, no significant progress has been made to formalise it in the Turkish education system. Students are taught by listening to the teacher talking, resulting in the teacher being the subject in the learning process.
Pakistan Ministry of Federal Education & Professional Training (2018)	Education is seen as a significant contributor to social- and economic development. Pakistan aims to achieve this objective by equipping young people with knowledge, creativity, critical thinking-, and leadership skills to play a responsible role as global citizens. Pakistan identified creativity as a critical skill for their youth; however, various educational challenges enjoy priority over the formal implementation of creativity in their education system.

Table 2 shows that developing countries face various challenges in education concerning creativity.

Duncan (2013) identified the importance of education around the world, but more specifically for developing countries, and quoted former South African president, Nelson Mandela, who stated that "education is the most powerful weapon which you can use to change the world." Rueckert (2019) opines that developing countries still battle with various issues in their education systems such as a lack of educational funding, the quality or lack of educators, insufficient schools, lack of essential education material, exclusion from education due to discrimination (e.g., gender, disabilities, language, ethnicity etc.), countries in war or at risk of conflict, and various poverty factors (e.g., travel distance between home and school, hunger and poor nutrition, cost of education). These barriers withhold children from their basic human right to education. Furthermore, as indicated in Table 2 above, many developing countries focus on their own immediate educational challenges that include inadequate education systems, poor quality of education, insufficient funding, language barriers in education, poorly qualified educators, corruption, high drop-out rates, school violence and inequality of education. These constraints avert developing counties from developing education systems that priorities creativity. It is, therefore, evident that in order to change the South African educational landscape, and consequently the world, these barriers should be addressed, not necessarily in isolation, but as part of the critical and pressing issues of which creativity should be included as an equal pressing element in the South African education system. Creativity should be regarded as important as literacy (Robinson, 2006). Not only will this bridge the gap between the rich and poor, but it will also provide South Africa with the ability to maintain economic competitiveness in a global environment. Creativity has previously been identified as one of the critical skills to overcome the effects of Industry 4.0 and sustaining a competitive economy. Davis (2016) has warned that if countries do not address Industry 4.0, this "revolution will lead to situations where the gap between the richest and the poorest in the world will become even greater".

Creativity in the National Diploma: Retail Business Management
According to SAQA (2018), creativity is a vital requirement for the ND in RBM qualification. The qualification stipulates that creativity should be one of the critical embedded outcomes for the RBM qualification where learners must be able to "identify problems and creatively make responsible decisions to solve problems to benefit the retail business and community as a whole" (SAQA, 2018). RBM graduates should, therefore, be able to think and solve problems beyond prevailing confines of the curriculum. They should be able to challenge the status quo and use creativity to confront the fast-changing environment of the retail industry.

Graduates should be able to generate creative resolutions and strategies in solving multifaceted management challenges facing the industry. However, because creativity is such a diverse topic, it seems that educational institutions do not commit in the development of learner creativity and that it is a topic sidestepped by educators who do not always see the importance of creativity in a higher education environment. Stemming from the above, it is evident that "the roots of a creative society are in basic education" (Morris, 2006). Consequently, it is essential to guide and support students in applying and developing their creative thinking skills on various levels. Education is a critical component for meeting the scare skills (i.e., leadership, management, product knowledge, computer literacy (basic and advanced), customer service, supervision, communication, numeracy and literacy, financial acumen, and problem-solving (creativity)) required from the retail industry (W&RSETA, 2017).

3. Research design, methodology and methods

This research study fell within the positivistic research paradigm, was empirical in nature, and took on the form of survey research to glean primary data pertaining to the creativity levels of RBM students. Quantitative data were obtained from full-time undergraduate ND students enrolled in the RBM course at a selected university in the Western Cape. In order to compare the creativity profile of these students with individuals from the retail industry that have some form of business experience, students from the CPUT Retail Academy served as a comparison sample. The Retail Academy is a function under the Wholesale and Retail Leadership Chair situated at the CPUT. The academy is funded by the W&RSETA and offers various qualifications aimed at addressing the critical skills shortages experienced in the South African WR sector. It further aims to drive research and contribute to the development of professionalism in the WR sector.

Since the size of the main target population (first- to third-year ND: RBM students) was known, probability sampling was used to select the sample. A total of 159 RBM students out of a possible 530 students participated in this research study. Representing the Retail Academy students, a total of 16 out of a possible 17 students voluntary participated in the study. These students represented various retail businesses and had sufficient retail experience (an average of 13.2 years) to use their creativity levels as a norm/standard to be compared against their full-time ND: RBM counterparts. The Retail Academy students were selected by their employers to enroll for the RBM qualification as they have been identified as having potential (the necessary motivation and skills) to become future store managers for their companies. Data were collected using a questionnaire, with the primary intent to obtain data for analysis and to draw relevant conclusions. The questionnaire consisted of 40 Likert-scale questions (where students had to rate their creativity levels), and open-ended questions where students had to corroborate their understanding of creativity and their creative aptitudes on the different levels of creativity as pronounced by Maslow (1976). Primary creativity was determined by listing various uses for a variety of objects like a teaspoon, chair, and paper clips. Secondary creativity was evaluated by combining random words into a single sentence, completing incomplete pictures, and combining shapes to form a picture using provided materials such as paperclips, blank sheets of paper, pencils, and a paper bag. Students participated in the study out of free will, which implies that they could withdraw from the study at any time; all had to be ND: RBM students registered at the CPUT.

4. Results and Discussion

Considering the research objective of this paper, relevant discussions in this section take place under the following headings: 1) descriptive statistics and 2) inferential statistics.

Descriptive statistics
Considering the responses received from 175 participants (159 first- to third-year students and 16 students from the Retail Academy), a summary of the descriptive statistics is shown below.

First- to third-year participants' age ranged between 18 and 33 years, of which the majority was African (85%) and female (62.3%). As expected, most of the participants (71.6%) had no prior retail experience. On the other hand, students from the Retail Academy had a minimum of three years of RBM experience. These

participants had an accumulated 203 years of experience – an average of 12.7 years per participant. Only 23.2% of the first-year participants selected RBM as their first choice of study compared to their second-year counterparts (30.4%). Of these, 23.8% did not progress from their first- to second year, and 28.7% did not reach their third year of studies. This implies that an overwhelming majority of 76.8% of students did not study a course of their first preference, and almost a third of these did not complete the RBM qualification. For the purpose of this research study, these aspects did not have an adverse effect on the results, but within the context of the curriculum, it proved to be problematic. It was evident that if a student had no or a limited understanding of the subject matter, developing their creativity was more challenging.

Inferential statistics
In order to ascertain the participants' self-perception of their own creativity levels, they had to complete an array of Likert scale (1 = strongly disagree, 2 = disagree, 3 = moderately disagree, 5 = moderately agree, 6 = agree, and 6 = strongly agree) questions (scored out of a total of 240) in Part A of the questionnaire. Part B consisted of open-ended questions evaluating the degree of a participant's creativity (with an unlimited score total), while in Part C participants were presented with unstructured material to demonstrate their creativity (scored out of a total of 20).

Part A: Self-perception of creativity
In Part A, participants were required to evaluate their self-perceived levels of creativity according to the following main categories of Maslow (1954):
- **Higher-order of lateral thinking (cognition):** The ability to think, reason and remember, and to use these abilities for higher-level creative thinking/problem-solving.
- **Eco-systematic influence in creative thinking:** The impact of a direct, dynamic and complex environment that will influence one's way of thinking or problem-solving.
- **Personal experience:** The everyday experience and responsiveness of internal and external happenings that influence an individual's response or action concerning creativity.

A summary of the results is shown in Table 3.

Table 3: Summary of Part A: Self-perception questionnaire (ND: RBM students)

	Creativity Statements	Strongly Agree (6)	Agree (5)	Moderately Agree (4)	Moderately Disagree (3)	Disagree (2)	Strongly Disagree (1)	Mean	Standard Deviation
1	Creativity is very important to be successful.	51,6%	35,8%	10,7%	0,6%	0,0%	1,3%	**4,3**	**0,9**
2	Creativity is an important component in the Retail Business Management curriculum.	34,0%	40,9%	20,1%	3,1%	1,3%	0,6%	**4,0**	**0,9**
3	I prefer to study in a creative environment.	51,6%	23,9%	15,7%	5,7%	1,9%	1,3%	**4,1**	**1,1**
4	Creativity is not an important characteristic required to be a successful Retail Business Manager.	5,7%	4,4%	11,9%	19,5%	23,3%	35,2%	**1,4**	**1,5**
5	Creativity is a critical requirement for being a successful Retail Business Management student.	31,4%	28,9%	28,3%	4,4%	3,8%	3,1%	**3,7**	**1,2**
6	I am by nature a creative student – creativeness comes naturally to me.	20,1%	27,0%	32,1%	11,9%	4,4%	4,4%	**3,3**	**1,3**
7	Fellow students do not see me as a creative student.	11,9%	10,7%	33,3%	14,5%	16,4%	13,2%	**2,5**	**1,5**
8	I am more creative than the average student.	9,4%	23,3%	41,5%	15,1%	6,3%	4,4%	**3,0**	**1,2**
9	I trust my judgement with my creative abilities.	27,7%	41,5%	20,8%	3,1%	4,4%	2,5%	**3,8**	**1,2**
10	I become more creative the further I progress with my studies.	52,8%	25,8%	17,6%	1,3%	1,9%	0,6%	**4,2**	**1,0**
11	I produce a number of creative ideas each week.	12,6%	18,9%	42,8%	16,4%	6,9%	2,5%	**3,1**	**1,2**
12	I am stimulated in an environment where I have the freedom to think for myself.	42,1%	25,8%	23,3%	8,2%	0,0%	0,6%	**4,0**	**1,0**
13	I need to keep developing my skills on becoming more creative.	62,3%	25,8%	9,4%	1,3%	0,0%	1,3%	**4,5**	**0,9**
14	I am most creative when I work alone.	34,0%	21,4%	23,9%	12,6%	5,0%	3,1%	**3,6**	**1,4**

	Creativity Statements	Strongly Agree (6)	Agree (5)	Moderately Agree (4)	Moderately Disagree (3)	Disagree (2)	Strongly Disagree (1)	Mean	Standard Deviation
15	I use many resources in evaluating effective solutions for a problem.	25,8%	34,6%	29,6%	8,8%	0,0%	1,3%	3,7	1,0
16	Evaluations at CPUT do not test my creative abilities.	12,6%	10,7%	20,1%	28,9%	13,2%	14,5%	2,4	1,5
17	I am normally the one in my study group that initiates new ideas or thoughts.	15,7%	25,2%	39,6%	11,9%	5,0%	2,5%	3,3	1,2
18	I would rather listen to ideas from others.	11,9%	15,7%	25,8%	23,9%	11,9%	10,7%	2,6	1,5
19	I prefer to combine/alter existing ideas to generate something new.	36,5%	35,2%	20,1%	6,3%	1,9%	0,0%	4,0	1,0
20	I am most creative when working in a team.	31,4%	19,5%	25,8%	13,2%	7,5%	2,5%	3,5	1,4
21	I am excited by my own new ideas.	45,9%	30,8%	20,1%	2,5%	0,0%	0,6%	4,2	0,9
22	I am outspoken and willing to present/defend new ideas.	37,1%	30,8%	20,1%	8,2%	3,8%	0,0%	3,9	1,1
23	Fellow students see me as unpredictable in my thinking and interpretations of situations.	20,8%	18,9%	32,1%	18,9%	5,7%	3,1%	3,2	1,3
24	I have to concentrate hard to be creative.	32,1%	22,6%	25,2%	12,6%	5,0%	2,5%	3,6	1,3
25	I enjoy challenging situations where I can prove my creativeness.	43,4%	30,8%	20,8%	1,9%	1,3%	1,9%	4,1	1,1
26	I seldom come up with ideas for solving a problem.	8,2%	33,3%	28,3%	14,5%	10,7%	5,0%	3,0	1,3
27	I always evaluate situations to find the most creative solution(s).	30,2%	30,2%	30,8%	6,9%	0,6%	1,3%	3,8	1,1
28	I am creative as a result of my self-discipline.	33,3%	33,3%	20,1%	8,8%	2,5%	1,9%	3,8	1,2
29	I always find different/unusual ways of doing my daily activities.	25,8%	23,3%	35,8%	10,7%	3,1%	1,3%	3,5	1,2
30	I think outside the "box" and are happy finding solutions outside the "box".	28,9%	30,2%	30,2%	8,2%	1,3%	1,3%	3,7	1,1
31	I have specific daily time set out for creativity.	8,2%	11,3%	21,4%	23,9%	18,2%	17,0%	2,2	1,5
32	Creative ideas come to me in my dreams.	6,3%	13,8%	15,1%	21,4%	20,8%	22,6%	2,0	1,5
33	I have my own place where I work on my creativity.	10,1%	13,2%	19,5%	21,4%	13,2%	22,6%	2,2	1,6
34	I prefer to assist fellow students to be creative rather than be creative myself.	15,1%	7,5%	28,9%	18,2%	19,5%	10,7%	2,5	1,5
35	I always solve problems with solutions that are familiar, and the outcome is known to myself.	20,8%	27,7%	27,0%	16,4%	6,9%	1,3%	3,4	1,2
36	I am not given enough opportunities to show my creativity in my studies.	20,8%	18,2%	27,0%	14,5%	11,9%	7,5%	3,0	1,5
37	I am more creative when I have tight deadlines to meet.	33,3%	18,9%	22,0%	11,9%	8,2%	5,7%	3,4	1,5
38	I prefer to study following a routine.	30,2%	23,3%	18,2%	13,8%	8,8%	5,7%	3,3	1,5
39	I generate a number of possible solutions to a problem or a situation.	24,5%	32,7%	36,5%	4,4%	1,9%	0,0%	3,7	0,9
40	I am uncomfortable in taking time to solve crucial problems.	13,8%	16,4%	28,3%	22,6%	8,2%	10,7%	2,7	1,5

Stemming from the results in Table 3, it appears that the the five questions which had the most significant influence on students' self-perception of creativity included Question 13 (mean score of 4.5), indicating the importance students place on the need to continually develop their creative skills. Question 1 (mean score of 4.3), demonstrating the valua of creativity in being successful. Questions 10, the perception that the creativity levels of the students increase from year one to three as they progrss in their studies and question 21 (mean score of 4.2) that students are exited by their own creativity. Questions 3 (mean score of 4.1) emphasise the importance of studing in a creative environment and and question 25 the importance of challenging situation where students can use their creativity. Questions 2, 12, and 19 (mean score of 4.0) reflects on th importance of creativity in the RBM curriculum, freedom to use own initiative by thinking for themselves and students' preferense to combine/alter existing ideas into something new . In addition, the Based on the results above, it is acknowledged that the full-time RBM students did not receive any formal creativity skills development within the South African education system, resulting in them having less knowledge and understanding of creativity; they also lacked retail experience. This became more apparent in Part B and Part C of the questionnaire, as discussed in more detail below.

Part B: Understanding of creativity and creative ability

Part B (and Part C) of the questionnaire were evaluated and scored by the researcher according to the levels of creativity identified in the participants' answers. To ensure the reliability and validity of results, the scores were moderated by two independent subject-matter experts. This ensured unbiasedness in the assessment of the answers.

Part B of the questionnaire evaluated students' understanding of creativity and their creative ability by means of the following five questions:

Question 1: Explain your understanding of creativity: This question evaluated students' perceived understanding of creativity. Participant responses were evaluated on a scale adapted from the levels of creativity as described by Maslow (1954):

- **High levels of creativity (Primary creativity):** Student understands creativity as a process used by individuals to make new/original discoveries or innovations/concepts. (Mark allocation = 3 out of possible 3).
- **Intermediate levels of creativity (Secondary creativity):** Students understand creativity as discovering methods to combine earlier creativity to find new discoveries or methods. (Mark allocation = 2 out of possible 3).
- **Low levels of creativity:** Student indicates no understanding of creativity. (Mark allocation = 1 out of possible 3).

Question 2: List as many as possible uses for a teaspoon; Question 3: List as many as possible uses for a chair; Question 4: List as many possible uses for paperclips: These three questions were used to 1) determine how many different uses the students could identify for a given object (captured as an "n" factor), and 2) evaluate each factor provided according to the three levels of creativity as defined in Question 1 (Part B). For each n factor with a high level of creativity, the student was awarded three marks, for each n factor with an intermediate level of creativity, the student received two marks, and each n factor with a low level of creativity was awarded one mark. Based on the results, a creativity ratio for each student could be calculated by multiplying the n factor with the level of creativity score. Questions 2, 3 and 4 were designed to ensure that all participants could score according to their own creativity levels as the objects used in the questions were everyday objects (teaspoon, chair, paperclips) and not related to any retail business experience. The objective of these three questions was to test the perceived creativity of a student. The data revealed that the first-year students, although with higher self-perceived creativity, could not prove higher creativity levels and scored substantially lower than the Retail Academy students.

Question 5: Link the following words in one sentence: Retail, customers, bicycle and conflict: This question tested the ability of students to combine four basic retail-related words into one sensible sentence. Students were also evaluated on the different levels of creativity shown. Similar than previous results, the RBM students could not prove their self-perceived higher levels of creativity using high levels of creativity (primary creativity), something the Retail Academy students could do. One obvious observation was the inability of participants, especially full-time RBM students, to construct a grammatically correct sentence with the given words.

Stemming from the above, Part B indicates the superior creativity levels of the Retail Academy students as they outscored their full-time counterparts. RBM students' understanding of creativity was tested practically, and they scored substantially lower than the Retail Academy students. It could be argued that the Retail Academy students used their knowledge of creativity, obtained from their working environment, to score substantially higher by providing more examples of high-level creativity. Although RBM students had a large n factor, their level of creativity was low, resulting in 1 mark, whereas the Retail Academy students had a lower n factor, but their creativity level was high, resulting in higher totals (maximum 3 marks). A notable observation was the number of full-time students who merely defined creativity as "thinking outside the box" but could not provide clear evidence regarding their understanding or "higher levels" of creativity. It can, therefore, be inferred that RBM students do not meet the creativity skills as a critical outcome of the ND: RBM qualification, thereby rejecting the hypothesis ($H_{1)}$.

Part C: Creativity profile

Part C of the questionnaire evaluated the higher-level creativity of students in the form of unstructured and incomplete figures that participants had to complete. Participants had total freedom to provide evidence of their creativity. The material provided to participants included three colour pencils, three paper clips, three blank sheets of paper, a page with circles and squares, an uncompleted diagram, and basic forms that had to be combined into a single form/drawing. The first section consisted of nine circles and six squares on an A4 page. Students were evaluated on their level of creativity using the provided shapes. The creativity levels ranged from low-level creativity (when individual shapes were used) to high-level creativity (when an advanced combination/linking of shapes was used) that included the use of paper clips and the rest of the page (refer to Section 4.2.4).

One constraint of the study was the available venues used to conduct the research. Venues were standard lecture rooms that allowed participants who were not sure what to do, to look around to see what other participants were doing, thus gaining ideas. Many participants found inspiration from observing what other participants were constructing. Ideally, venues should have been set up like a study hall were students were isolated by using individual workstations similar to that of voting booths.

Creativity comparison: ND: RBM vs Retail Academy students

Using the questionnaire, the creativity results of full-time RBM students were compared to their Retail Academy counterparts who represented a variety of retail businesses in the South African WR sector. The Retail Academy cohort was deemed a suitable comparison sample as they had an average of 12.7 years of retail experience per student. This period is considered to be sufficient to fully understand the WR sector, have adequate exposure to creativity and experience in the challenges and opportunities of the WR sector and develop creative skills as required by the WR sector.

Table 4: Average creativity score and -level per student

	Part A (Out of possible 240 points)	Measured against Retail Academy	Part B (Unlimited points)	Measured against Retail Academy	Part C (Out of possible 40 points)	Measured against Retail Academy	Total (Parts A, B and C)	Measured against Retail Academy
First-year cohort (n=56)	132.70	5.74%	26.64	-58.70%	9.66	-38.20%	169.00	-17.81%
Second-year cohort (n=46)	137.43	9.51%	33.83	-47.55%	12.87	-17.66%	184.13	-10.46%
Third-year cohort (n=57)	133.72	6.55%	27.51	-57.35%	12.58	-19.51%	173.81	-15.47%
Retail Academy cohort (n=16)	125.50	0.0	64.50	0.0	15.63	0.0	205.63	0.0

Table 4 above indicates no significant increase in the creativity levels of RBM students from their first- (169.0) to third year of study (173.81). However, the third-year cohort's average creativity levels decreased on average by 10,32 points per student to an average total of 173,81. It can, therefore, be concluded that students are not afforded with sufficient opportunity to develop their creativity within the ND: RBM qualification. The average score per student for the retail academy students were 205.63, thus

It can thus be concluded that ND: RBM students are creative; however, their level of creativity diverges from the industry norm as set by the Retail Academy cohort. Considering Part A of the questionnaire, the ND: RBM students obtained higher scores (on average 7.26%) than their Retail Academy counterparts. The variance in the creativity levels occurred in Part B and Part C of the questionnaire. For Part B, where the different levels of creative thinking were validated, results reveal that the full-time ND: RBM students did not meet the required creativity levels expected by the retail industry. For Part C, results reveal that the full-time students, measured against the Retail Academy students, did not meet the required creativity levels expected by the WR sector. The RBM students scored on average 25.12% less than the Retail Academy students. It can be concluded that although RBM students perceived themselves as being creative, there is a lack in the

validation of their perceived creativity as evident in Part B and Part C of the questionnaire. In conclusion, stemming from the research conducted, The inference could, therefore, be made that ND: RBM students do not meet the expected creativity skills (critical outcome) as required by the SAQA -registered ND: RBM qualification, thereby rejecting the hypothesis (H1). It should, however, be noted that despite the findings in this paper, it may be the case that H_1 is accepted in other instances.

5. Conclusion

The WR sector operates in a very dynamic and highly competitive global environment that deals with the impact of Industry 4.0 on a daily basis. Creativity is a critical skill for businesses to survive as it is the fuel required for driving the modern knowledge worker in generating new ideas and opportunities using creative problem-solving techniques. Despite industry requirements, research results show that ND: RBM students will find it challenging to adapt and function in the demanding environment of Industry 4.0 as there is no significant increase in the creativity levels of RBM students from their first- to third year of study. Furthermore, the creativity level of ND: RBM students proved to be low and did not adhere to industry requirements. Furthermore, RBM students do not have the necessary creative skills to make a difference in the WR sector. Though third-year students had the knowledge required as prescribed in the outcomes of the ND: RBM qualification, they did not know how to apply this knowledge through creative thinking in an uncertain and new environment. Lower than expected creativity levels will have a direct and adverse impact on graduates' ability to cope in the WR sector. It can, therefore, be concluded that students enrolled for the ND: RBM qualification at the CPUT are not provided with sufficient opportunities to develop their creativity skills successfully. The inference could, therefore, be made that critical skills, associated with the incorporation of creativity in the education system, can bridge the current creativity gap that exists between the creativity levels of ND: RBM students and the creativity skills expected by the WR sector. Avenues for further research which are suggested include, but are not limited to, the possibility of using a creativity assessment tool as part of the selection tools for selecting candidates for gaining access to the ND: RBM qualification and to identify ways as to how RBM students can improve their creativity skills.

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Paper 33

Which psychographic variables influence the behaviour of rooibos tea consumers to increase sales?

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Abstract: Recent research has shown that black tea still dominates the consumer market against the steady growth and demand of the rooibos tea locally and internationally. Also, the black and rooibos teas target different consumers that make purchase decisions based on impulses, feelings, emotions, and perceptions. Psychographic variables are widely used in market segmentation and form part of any hybrid segmentation framework. The psychographic variables provide marketers with comprehensive understanding of lifestyle patterns and appeals of present and future consumers. But also, these variables guide marketers on how to communicate in future promotional strategies more effectively. The pilot study seeks to explore the psychographic variables namely activities, interests and opinions that influence the consumer behaviour of Herbal and Green Rooibos tea segments. A pilot survey was conducted at a Rooibos company targeting a small sample of the active consumers in the former Transvaal region. Furthermore, a descriptive methodology was employed, using an online questionnaire. The sampling method was convenience. The results of this study reveal that Rooibos consumers like the taste of Herbal and Green Rooibos teas. The study also revealed that the psychographic variables that will influence the Herbal and Green Rooibos tea segments are Interests, and Opinions, with Activities as the most effective variable. Current studies show that psychographic Business-to-business (B2B) and business-to-consumer (B2C) behaviour are missing in the existing body of knowledge, making this research significant.

Keywords: *Rooibos, Psychographic Segmentation, Consumer behaviour, Market Segmentation*

1. Introduction

Consumer behaviour has traditionally been thought as the study of "why customers buy" but with the years' it has transformed to develop relevant strategies to influence consumers to buy specific products. These consumers individual decisions are affected by rational and non-rational (emotions) reasons influenced by external variables such as reference groups and family, and individual variables, such as personality and perception (Rousseau, 2007). Therefore, consumer behaviour is a typology of individuals, groups, organization and other related activities associated with obtaining, consuming and disposing of products and services (Blackwell et al, 2001; 2006). As long back as in the 1960s Wedel and Kamakura (2000), has industrial development in various sectors of the economy induced strategies of mass production and marketing because the focus of the strategies were on manufacturing, and not on reduction of production cost or satisfying the consumers. But over the years' production processes have become more flexible, and consumer affluence led to diversification of demand. Also, as market-oriented thought evolved with companies, the concept of market segmentation emerged. Therefore, market segmentation has become an essential element of marketing. Since, goods can no longer be produced or sold without considering consumers' needs and wants as well as without recognizing the heterogeneity of those needs and wants. Kotler *et al.* (2016), explain that psychographic segmentation divides buyers and consumers into different groups based on their social class, lifestyle or personality characteristics.

While demographics ascertain consumers' needs for products and the ability to buy them, psychographic segmentation explicate their purchase decisions and the choices they make within buying alternative options available to the consumers. Because of their versatility, psychographic segmentation is widely used in market segmentation and form part of almost any current hybrid segmentation framework. Rooibos has become an important local and international commodity of South Africa. Rooibos is indigenous to the South African Cederberg mountain range of the Western and Northern Cape Provinces, with some presence in the southern

KwaZulu-Natal province. This indigenous fynbos is naturally caffeine-free, comparatively low in tannin, and has potential health-promoting (Davies et al, 2019a; Davies et al, 2019b), properties and minerals such as copper, iron, potassium, calcium, zinc, and magnesium (Joubert & de Beer, 2011; Bienabe & Troskie, 2007). In South Africa, rooibos tea is enjoyed by guesstimated 30.9 million consumer households (Anon, 2013).

However, the rooibos industry struggles to find market share against beverages such as the various black and green teas (camellia sinensis) and coffees on the consumer market. These beverages target different consumers that make buyer behaviour decisions based on feelings and emotions and impulses. Jage (2011), notes that the fastest growing market segment that enjoys the tea for health and wellness reasons are the health conscious millennials between the age groups of 18 to 28, and they are predominately men. Rooibos has five different kinds of teas namely, Fermented[10] Conventional, Herbal, Organic non-conventional, and Unfermented [11] Green and Organic Green rooibos teas. Due the nature of the research, the study focuses only on Herbal and Green Rooibos teas. A survey conducted by the South African Audience Research Foundation for the period 2011 to 2015, indicates that there was a 6 percent decrease from 58 percent to 52 percent of the Black tea consumers compared to a 2 percent increase of the Rooibos tea consumers from 29 percent to 31 percent (African News Agency, 2016). Sinha (2017) and Du Toit (2016), report that Black tea still dominates the consumer market against the steady growth and demand of the Rooibos tea locally and internationally. Sinha (2017), reports that the Black tea is the most popular tea because the consumer is familiar with the tea. Recent studies (SARC 2019, 2018, 2017) from international and local scholars focus on the various health and wellness benefits; and not psychographic consumer behaviour motives that explore the lifestyle patterns of the Herbal and Green Rooibos tea segments.

According to several studies conducted by Brotspies and Weinstein (2018), supported by Weinstein (2011), and Barry and Weinstein (2009), there is an academic gap in the current market segmentation framework that are market analyses, market selections, marketing theories and customer acquisitions are not enough to guide psychographic business-to-business (B2B), business-to-business-to-business (B2B2B) and business-to-business-to-consumer (B2B2C) markets. Therefore, the purpose of the study is to explore the various psychographic variables namely activities, interests and opinions that influence the consumer behaviour of the unfermented Herbal ([12]Tisane) and fermented Green tea segments. Consequently, the study seeks to contribute to the missing gap (Brotspies and Weinstein, 2018); Weinstein (2011); Barry and Weinstein (2009), in the exiting body of knowledge of market segmentation.

2. Review of Literature

A general definition of consumer behaviour is the study of individuals, groups, organizations and all other activities associated with buying. These aspects conform to all prospects of buying behaviour from activities such as pre-purchase, post-purchase consumption, evaluation, and disposal activities. Therefore, consumer behaviour is also regarded as dynamic; that involves interaction among affect and cognitions behaviours of environmental events; and lastly, it involves exchanges between inhabitants (Peter & Olson, 1994).

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[10] It refers to the traditional process of fermentation that includes cutting, bruising and wetting of leaves with water. The damp leaves are allowed to ferment in the sun for 12 hours (SARC, 2019; 2018; 2017).

[11] It refers to the process of harvested, cut and dried immediately without the fermentation step (SARC, 2019; 2018; 2017).

[12] Herbal tea infused with dried or fresh flowers or leaves (AEDT, 2008).

Since the introduction of market segmentation by Smith (1956), the concept become a central concept of both marketing theory and practice. Companies started to identify specific needs and wants of groups of customers to develop the right sales offer for one or more sub-markets, and thus obtain a competitive advantage. Weinstein (2011), is of the opinion that innovative and effective market segmentation has become a strategic imperative for emerging business and technology markets. Therefore, the purpose of market segmentation is three-fold namely i) to divide a market into a variety of homogeneous or heterogeneous sub-segments, ii) to develop an appropriate marketing mix for the sub-segments, and iii) to use it as a beneficial concept for marketing and advertising planning purposes (Kucukemiroglu, 1999; Lin, 2002),

The fundamental principle of psychographic segmentation is that the more marketers can identify and understand the consumers' needs, the more effective could marketers communicate with and serve the potential consumer or buyer (Kucukemiroglu, 1999). Psychographic segmentation assists marketers to describe a consumer market segmentation, which will enable the organization to reach and understand the potential and prospective consumer or buyer. Weinstein (2014), expresses the opinion that it is imperative that marketers recognize psychographic segmentation as a contributor to successful market segmentation. Kucukemiroglu, (1999), notes that the lifestyle patterns can provide a broader, yet, more in-depth views of consumers so that marketers can understand the needs and wants of the consumer in a more proficient manner.

Plummer (1974), demonstrates the key features of psychographic variables namely activities, interests and opinions (AIO). These variables cover the following categories:
i) "Activities reports the behaviour related to club membership, community, entertainment, hobbies shopping, social events, sports, work and vacation. ii) Interests measures the degree of excitement about and attention to achievement, community, family, fashion, food, home, job, media and recreation. iii) Opinions covers the beliefs about business, culture, economy, education, future, politics, and products, self and social issues" (Wedel and Kamakura, 2000). Kucukemiroglu (1999), contends that psychographic segmentation has been a beneficial concept for marketing and advertising planning purposes, representing a set of distinctive concepts that form part of the personality and values of the consumer. Psychographic segmentation relates to the level at which the consumer lives their life, spends their money, and allocate (Anderson & Golden, 1984) their time. Furthermore, psychographic segmentation measures consumers' activities, attitudes, personality, and values in terms of the following:

- What benefits does the consumer have and how do those benefits play an important role in the consumer's immediate surroundings;
- How do the consumer view him or herself, and how do their choices reflect the world in which they are made; and
- Which basic demographic characteristics of the consumer allow for cross-referencing?

Kucukemiroglu (1999), claims that the most commonly used determinants of satisfaction to psychographic data have been activities, interests, and opinions (AIO) rating statements. Furthermore, Vacek (1976), reports that psychographic variables are drawn from at least three underlying concepts namely, personality, lifestyle, and product benefits and attributes. Kucukemiroglu (1999), claims that the most commonly used determinants of satisfaction to psychographic data have been activities, interests, and opinions (AIO) rating statements. Kucukemiroglu believes that the notion of social class adds depth to demographics, but needs to be carefully refined in order to obtain valuable insights into the distinctive target market. Kucukemiroglu, (1999), supported by Weinstein (2014) and Mitchell (1995), describes that psychographic segmentation has been a beneficial concept for marketing and advertising planning purposes (Wells & Tigert, 1977; Kaynak & Kara, 1996), representing a set of distinctive concepts that form part of the personality and values of the consumer, at which level the consumer lives their life, spends their money, and allocate their time. Therefore, the focal point of marketers and consumer researchers have generally been on identifying the broad trends that affect how consumers live, work, and play on a daily basis. The latter approach enables a population to be viewed as distinct consumers with feelings and tendencies, addressed in unequal segments to engage in a more efficient manner to make use of a mass marketing. Mitchell (1995), supports the views of Weintein (2014), that psychographics can be useful when applied to a variety of marketing-related professionals such as product designers, media analysts, product managers, package designers and copywriters. In conclusion,

according to Young (1971), "the only way to ensure that measurements of personality and lifestyle are relevant to the marketing problem is to analyze them within the context of a particular product category". Therefore, the focus of the study is exploring the how does the psychographic variables influence the behaviour of the consumers in other words, the wants and not the needs of the consumer. But also, these variables guide marketers on how to communicate in future promotional strategies more effectively to target attitudinal and behavioural loyal.

3. Methodology

Due the nature of the research phenomenon descriptive research strategy was executed to conduct the study. Descriptive research enables the researcher to presents a picture of the specific details of a situation (Neuman, 2006), in order to answer the research problem. A pilot study was conducted to test the measuring instrument (Fouché & Delport, 2011), because the focus of the study s on the want of the consumer and not need. An online survey was used to collect data over the period of two-weeks, which covered following regions: Gauteng, Limpopo, Mpumalanga, and North-West provinces in South Africa.

Since this was a pilot study, the link to the questionnaire was sent to a small sample of active consumers from the company's database using purposive sampling. Before the survey, a review was conducted by four researchers to assess for ambiguity and dichotomy questions (Collis & Hussey, 2009), and minor amendments were identified. The type of question used in the instrument were very similar to those incorporated by Tigert (1969). In this regard, a 5-point Likert scale was used such as "Strongly disagree", "Disagree", "Neutral", "Agree", and "Strongly agree" (See appendix A). The survey consisted of two sections. The first section, asked for the Demographical background of the consumer namely i) in which province the respondent stay, ii) the gender of the respondent. The last section of the questionnaire used the five-point Likert scale. This section included the Lifestyle background, a combination of 24 activities, interest and opinion (Wells & Tigert, 1977; Plummer, 1974), statements were used to identify the lifestyle patterns of the Rooibos consumers. The questions to 24 close-ended and 1 open-ended.

4. Results and Findings

The SPSS statistical package was used to construct the descriptive statistics, and Microsoft Excel to construct the Clustered bar charts of the psychographic variables as presented in Figures 1a, 1b and 1c for Herbal Rooibos tea, and 2a, 2b and 2c for Green Rooibos tea. The descriptive statistics was used to construct the Frequency distribution as shown in Table 1 and Table 2. The pilot sample consists of twenty respondents, of which fifteen responded to all the questions and statements, and five partially. The results in Table 1, shows that only 1 male answered compared to 17 females; and in Table 2, shows that 13 responded from Gauteng, 1 from Limpopo and 3 from Mpumalanga provinces.

Table 1: Gender Selection

		Frequency	%	Valid %	Cumulative %
Valid	Male	1	6	6	6
	Female	16	94	94	100
	Total	17	100	100	

Table 2: Former Transvaal provinces - South Africa

		Frequency	%	Valid %	Cumulative %
Valid	Gauteng	13	77	77	77
	Limpopo	1	6	6	82
	Mpumalanga	3	18	18	100
	Total	17	100	100	

Six charts of each segments exploring the psychographic variables namely, AIO are shown in Figures 1a to 2c. In all, 7 activity questions, 10 interests' questions, and 16 opinions, and 1 open-ended question were asked. Figures 1 and 2 show the lifestyle patterns of the consumers for Herbal Rooibos and Green Rooibos teas.

Figure 1a and Figure 2a, show, the opinion variables, which measure the beliefs the consumer has about the Herbal and Green Rooibos teas. The following emerged, as can be seen in Figures 1a and 2a, sixteen compared to eleven agreed to like the taste of the teas. The differences in the frequency can be explained by statements in, Figure 1a, twelve respondents agree that the tea is "my favourite beverage", while fourteen respondents agree to like the "richness of colour" in the Herbal Rooibos tea, fifteen respondents agree to like the "smoothness of taste" in the Herbal Rooibos tea, and thirteen respondents agree that the Herbal Rooibos tea have a "strong heritage background".

When compared to the same statements in Figure 2a, six respondents agree that the Green Rooibos tea is "my favourite beverage", eight respondents agree to like the "richness of colour" in the Green Rooibos tea, nine respondents agree to like the "smoothness of taste" in the Green Rooibos tea, and ten respondents agree that the Green Rooibos tea have a "strong heritage background". Figures 1b and 2b, portray the interest variables that measures the degree of excitement the consumer has about the teas. The following emerged, as can be seen in Figure 1b, sixteen respondents agree that the Herbal Rooibos tea is "different from others", however fourteen respondents agree to like the "quality of brand", and "value for money", and six respondents agree to that the Herbal Rooibos tea have "sentimental value to my family and I. When compared the same statements in Figure 2b, fifteen respondents agree that the Green Rooibos tea is "different from others", while eight respondents agree to like the "quality of brand", ten respondents agree that the Green Rooibos tea is "value for money", and four respondents agree that Green Rooibos tea have "sentimental value to my family and I".

Figure 1c and 2c represent the activity variables that measures the behaviour the consumer has towards the Herbal and Green Rooibos teas. The following emerged, as can be seen in Figures 1c, fifteen respondents agree to like the Herbal Rooibos tea for "health and wellness reasons", thirteen respondents agree to like the Herbal Rooibos tea because of therapeutic reasons (relaxation), while one respondent agree to like the Herbal Rooibos tea for exercising and hiking (outdoors). When compared to the same statements in Figure 2c, fourteen respondents agree to like Green Rooibos tea for "health and wellness reasons", while thirteen respondents agree to like the tea because of therapeutic reasons (relaxation), and only two respondents agree to like Green Rooibos tea for exercising and hiking (outdoors). It emerged from the open-ended question as shown in Table 3, consumers like Herbal Rooibos tea for "health, taste and antioxidants" reasons. Whereas, in Table 4, consumers like Green Rooibos tea because the tea is "full of antioxidants that promotes a healthy body, and the "taste" of the tea.

Table 3: Rooibos Herbal Statements Other, please specify

	Frequency	%	Valid %	Cumulative %
Valid	17	85	85	85
Love the rooibos herbal teas for health and taste	1	5	5	90
No question was asked?	1	5	5	95
Rooibos tea is full of anti oxidants	1	5	5	100
Total	20	100	100	

Table 4: Rooibos Green Statements Other, please specify

	Frequency	%	Valid %	Cumulative %
Valid	17	85	85	85
Green tea is full of anti oxidants and promotes a healthy body	1	5	5	90
Love the anti-oxidant qualities and taste of the green rooibos tea	1	5	5	95
No question was asked.	1	5	5	100
Total	20	100	100	

Psychographic variables have a cause and effect result, meaning it is overlapping in nature, hence, the statements were repeated in the charts to detect the lifestyle patterns. The analysis of the results revealed that the consumers like the taste of Herbal and Green as indicated by the opinion and interest variables. The

interest variable measures the degree of excitement the consumer has to be affluent, whereas, the opinion variable measures the beliefs in the internal locus of control about the consumer. Therefore, the opinion and interest variables also revealed that the consumers prefer Herbal Rooibos teas more than the Green Rooibos. The opinion statements that are: "my favourite beverage", "richness in colour", "smoothness in taste", and "strong heritage background" relates to the product-related features. Furthermore, the interest statements that are "different from others", "quality of brand", "value for money", and "sentimental value to my family and I" relates to the non-product related features. The activity variable reports the behaviour and engagement of the consumer has to partake in any activity. The activity variable for Herbal and Green Rooibos teas indicate that consumers like the teas when engage in any hobbies, sports or social events, and for therapeutic reasons but have still have mixed feelings to consider the teas for any health and wellness reasons. Moreover, these variables relates to the product benefit features of the teas.

Herbal Rooibos Tea – Psychographic Variables

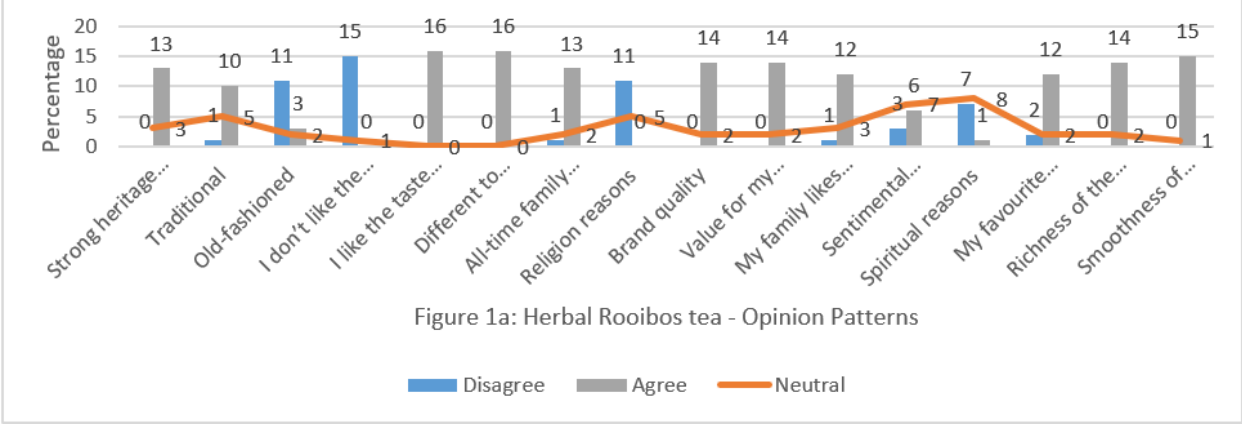**Figure 1: Herbal Rooibos tea – Lifestyle patterns**

Figure 1a: Herbal Rooibos tea - Opinion Patterns
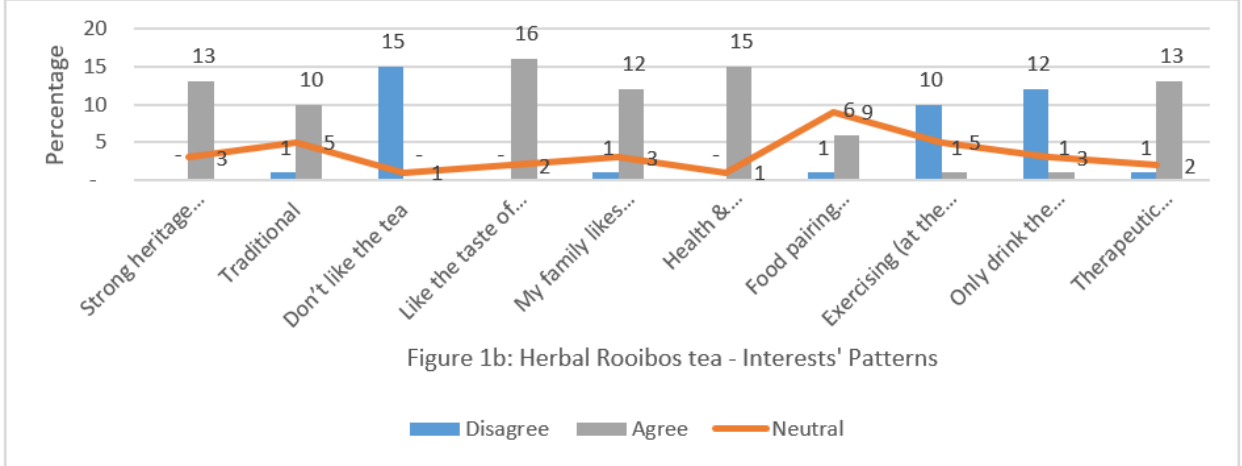
Figure 1b: Herbal Rooibos tea - Interests' Patterns

Figure 1c: Herbal Rooibos tea - Activities Patterns

Rooibos Green Tea – Psychographic variables

Figure 2: Rooibos Green tea – Lifestyle patterns
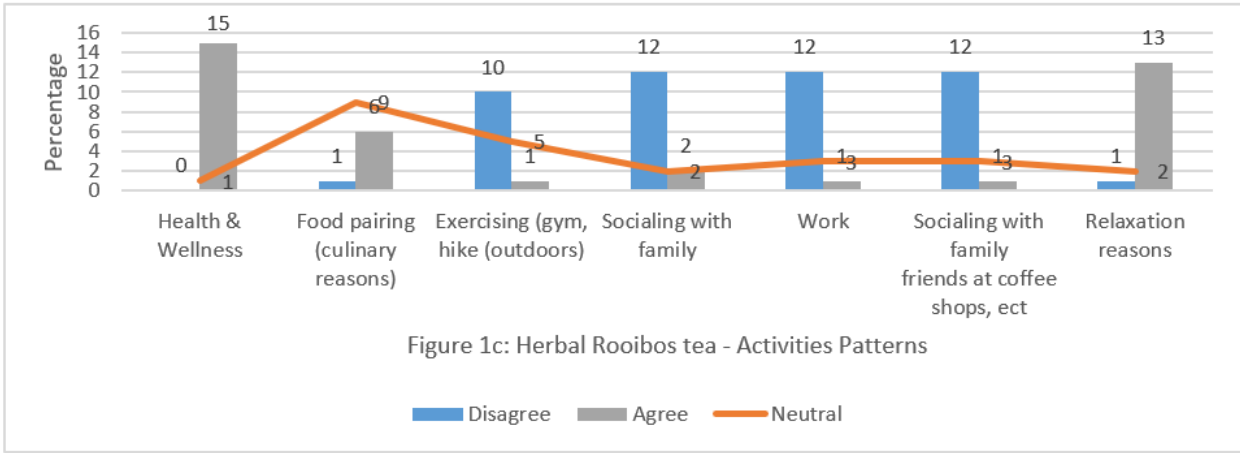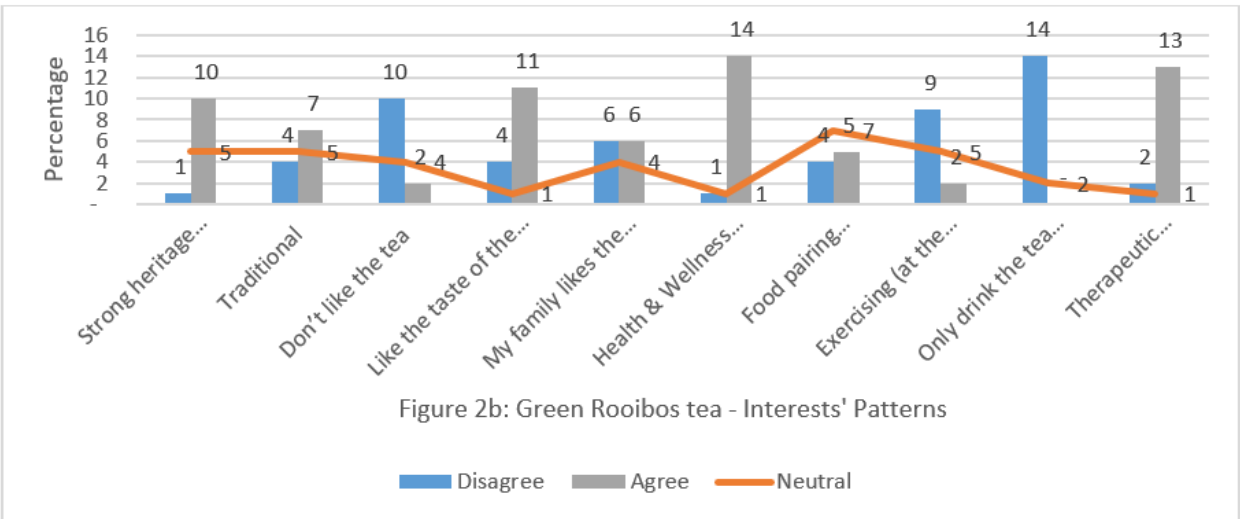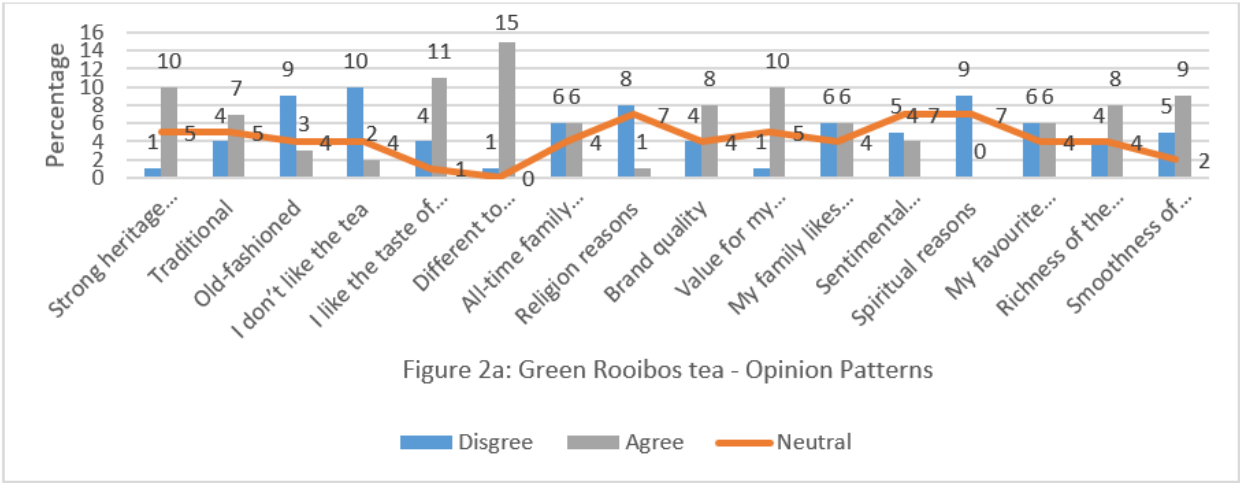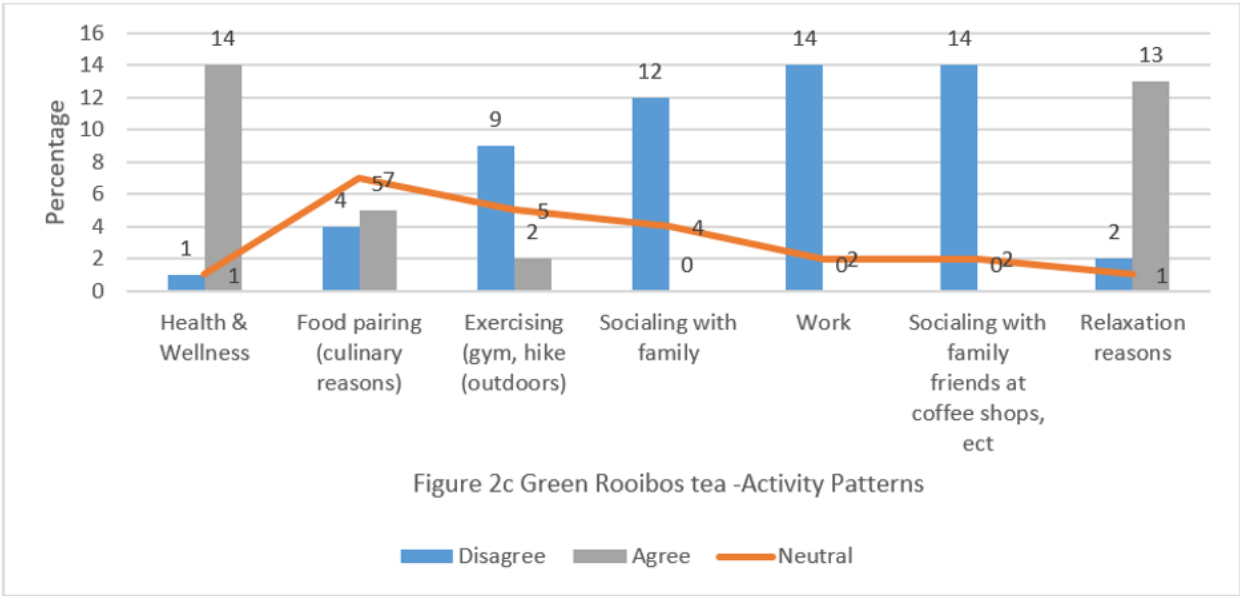

Figure 2a: Green Rooibos tea - Opinion Patterns

Figure 2b: Green Rooibos tea - Interests' Patterns

Figure 2c Green Rooibos tea -Activity Patterns

Due to the nature of the research problem the focus of the statements were on which psychographic variables will increase sales in the Rooibos industry. Hence, the focus to detect the lifestyle patterns by which product attributes and benefits influence the decision-making the consumer makes when decide to consume either Herbal or Green Rooibos teas. Product attributes consist of 2 features, i) Non-product related (Chittey, et al, 2005), that are the interest variables, ii) product-related features that are the opinion variables; activity variables relate to product benefits namely, functional, symbolic and experiential. Therefore, the psychographic variables that could assist the Herbal and Green Rooibos teas to increase sales against the black tea are Interests and Opinions, with Activities as the most effective variable. Also, when the interest (excitement) and opinion (beliefs) variables increase, it will influences the activity (behaviour) variable to increase the think sales statements that were "health and wellness", "exercising and hiking" and "therapeutic reasons (relaxation)".

5. Conclusion

Marketers are confronted by the same basic challenges of identifying product features that will fit the lifestyle patterns and appeals of a potential consumer (Mitchell, 1995). The main objective of the pilot study was to explore the psychographic variables namely activities, interests and opinions that influence the consumer behaviour of Herbal and Green Rooibos tea segments. The results reveal that psychographic variables will increase sales for Herbal and Green Rooibos teas are interests and opinions. These variables cover the product attributes that are the non-product and product that relate to aspects to guide marketers with the advertising of the teas. The results also reveal that the activity variable, however, feeds into "consequence" (benefits and detriments) as the hope that the consumer receive when consuming the teas. The result further reveals that once the value of the product is determine the desirability (Chitty et al, 2005: 161), of consequences, can serve to increase the like for Herbal and Green Rooibos teas. Therefore, these lifestyle patterns reveal how to implement the psychographic variables into a robust marketing strategy to create new market opportunities and enhance sales, contributing to the existing missing body of knowledge. Therefore, the results will benefit scholars and industry specialists.

Recommendations

This pilot study provides a springboard to conduct the main study (Van Zyl, 2019) and will improve the success and effectiveness of the research phenomenon.

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Appendix

Appendix A: Online survey

I am studying towards a Master in Marketing qualification at the Cape Peninsula University of Technology.

As a consumer, you play an important role on the demand side in the Rooibos industry. In fact, without your interest to purchase the tea, the industry will not grow. Hence, the purpose of the questionnaire is to understand and explore the Psychographic behaviour of Rooibos tea consumers. The questionnaire is divided into two sections namely Section A, Background information about the consumer and Section B, Lifestyle information about the consumer.

DISCLAIMER

As a Rooibos tea consumer, you are invited to share your views through this questionnaire. Your participation is entirely voluntary and your response will remain confidential. As a participant, you may withdraw from the study at any point

PLEASE NOTE that this is strictly an academic exercise. Information obtained from you will only be accessible to the researchers. The questionnaire will take about 10 minutes to complete, and it is carried out in accordance with the ethical clearance obtained from the Cape Peninsula University of Technology Ethics Committee.

Section A:- Background information about the consumer
Please indicate your gender type and *give one (1) answer only?*

No	Gender
1.1	Male
1.2	Female
1.3	Transgender

Please indicate in which geographical province in South Africa you reside and *give one (1) answer only?*

No	Provinces in South Africa
2.1	Gauteng
2.2	Northern-Cape
2.3	Western-Cape
2.4	Eastern-Cape
2.5	Kwa-Zula Natal
2.6	Free-State
2.7	Limpopo
2.8	Mpumalanga
2.9	North West

Section B: Lifestyle and personality information about the consumer
How important are the following aspects to you when deciding which Rooibos teas i.e. Herbal (*Tisane) and Green to purchase according to your liking.

No	Please respond to the following statements regarding *ROOIBOS HERBAL TEA*	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
3.1	Rooibos Herbal tea has strong heritage background					
3.2	Rooibos Herbal tea is traditional					
3.3	Rooibos Herbal tea is old-fashioned					
3.4	I don't like the Rooibos Herbal tea					
3.5	I like the taste of the Rooibos Herbal tea					
3.6	Rooibos Herbal tea is different to the other teas					
3.7	Rooibos Herbal tea is an all-time favourite to my family					
3.8	I like the Rooibos Herbal tea because of religion reasons					
3.9	I like the Rooibos Herbal tea because of the brand quality					
3.10	I like the Rooibos Herbal tea because I believe the tea is value for my money					
3.11	My family likes the Rooibos Herbal tea					
3.12	I like the Rooibos Herbal tea with my family					
3.13	I like the Rooibos Herbal tea because of health and wellness reasons					
3.14	I like the Rooibos Herbal tea because of food pairing (culinary reasons)					
3.15	I like the Rooibos Herbal tea only when I am exercising (at the gym, hiking (outdoors))					
3.16	I only drink the Rooibos Herbal tea when I am socialising with my family at home					
3.17	I only drink the Rooibos Herbal tea when I am at work					

3.18	I only drink the Rooibos Herbal tea when I am socialising with my friends at coffee shops, quick restaurants and etcetera
3.19	I like the Rooibos Herbal tea because of therapeutic reasons (relaxation)
3.20	I like the Rooibos Herbal tea because the brand has sentimental value to my family and I
3.21	I like the Rooibos Herbal tea because of spiritual reasons
3.22	I like the Rooibos Herbal tea because it is my favourite beverage
3.23	I like the richness of the colour of the Rooibos Herbal tea
3.24	I like the smoothness of the taste of the Rooibos Herbal tea
3.25	Other

Tisane Herbal tea infused with dried or fresh flowers or leaves
Other, please specify _____

No	Please respond to the following statements regarding *ROOIBOS GREEN TEA*	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
4.1	Rooibos Green tea has a strong heritage background					
4.2	Rooibos Green tea is traditional					
4.3	Rooibos Green tea is old-fashioned					
4.4	I don't like the Rooibos Green tea					
4.5	I like the taste of the Rooibos Green tea					
4.6	Rooibos Green tea is different to the other teas					
4.7	Rooibos Green tea is an all-time favourite to my family					
4.8	I like the Rooibos Green tea because of religion reasons					
4.9	I like the Rooibos Green tea because of the brand quality					
4.10	I like the Rooibos Green tea because I believe the tea is value for my money					
4.11	My family likes the Rooibos Green tea					
4.12	I like the Rooibos Green tea because of health and wellness reasons					
4.13	I like the Rooibos Green tea because of food pairing (culinary reasons)					
4.14	I drink the Rooibos Green tea only when I am exercising (at the gym, hiking (outdoors))					
4.15	I only drink the Rooibos Green tea when I am socialising with my family at home					
4.16	I only drink the Rooibos Green tea when I am at work					
4.17	I only drink the Rooibos Green tea when I am socialising with my friends at coffee shops, quick restaurants and etcetera					
4.18	I drink the Rooibos Green tea because of therapeutic reasons (relaxation)					
4.19	I drink the Rooibos Green tea because the brand has sentimental value to my family and I					

4.2 0	I drink the Rooibos Green tea because of spiritual reasons
4.2 1	I always drink the Rooibos Green tea because it is my favourite beverage
4.2 3	I like the richness of the colour of the Rooibos Green tea
4.2 4	I like the smoothness of the taste of the Rooibos Green tea
4.2 5	Other

Other, please specify _____

Thank you for completing the questionnaire

Paper 34

A Future-Focused Whole-Brain Model for the Administrative Professional

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Abstract: Revolutionary developments in information and communications technologies have a significant impact on the political and economic dialogue of developing economies such as Southern Africa, as a young participant in these global trends. Recognising the impact of changing economic structures on the future will continue to increase South Africa's ability to grow globally in terms of the current political and economic dialogue, by placing a competitive impetus on all South Africans. Individual South Africans, such as administrative professionals, are also affected. As a result of these revolutionary developments, the role of administrative professionals in the future world of work has irrevocably and significantly been affected with regard to the assimilation, processing and utilisation of information. This paper forms part of a larger research study, which in part determined the knowledge and skills requirements of South African organisations in the future world of work. This study analysed the impact of the global and the national key drivers of change and transformation on the skills requirements of the administrative professional, with the aim of developing a future-focused whole-brain model to be effective in the new world of work. For the purposes of this paper, the researchers only used the qualitative data that was gathered by means of semi-structured interviews investigating the perspectives of stakeholders regarding the required future skills of the administrative professional and data extracted from open-ended questions used in a survey. This study found, among other things, that functioning from all quadrants of the whole-brain model would be essential for optimal effectiveness. This finding is based on skills and knowledge that are regarded as essential for future success, because of the new diverse role of administrative professionals. Owing to the study's focus on the new world of work, the findings can be related to most occupations. Overall, this study contributes to the design of a future-focused whole-brain model addressing functional skills, essential skills and emerging skills required for optimal effectiveness of the administrative professional in the future-focused world of work.

Keywords: *Administrative professional, key drivers of change, whole brain, future skills, knowledge requirements*

1. Introduction

People never expected the world to become 'flat', where humanity lives in an interconnected world due to innovation and the concomitant growth that constantly transforms the global economy. Nevertheless, South Africa needs to be a global participant, where the competitive impetus irrevocably influences the way South Africans do business. To be a competitive global participant, South Africa needs to adopt pragmatic best practices. Businesses that fail to embrace a broader modality of socio-economic, geopolitical and demographic key drivers of change of a Fourth Industrial Revolution (4IR) (as illustrated in Figure 1) will not be able to utilise their most valuable resources and talent in order to compete more effectively in the evolving world of work. On the home front, the national key drivers of change, such as 'big data' as processing power, implementing flexible work as part of the changing nature of work, and the middle class evident in emerging markets, will play a pivotal role in affecting South African business models in terms of the demographic and socio-economic developments and technological changes. It is expected that these national key drivers of change will have nearly as strong an impact on business models and organisational structures as technological changes. According to the World Economic Forum (2016) and Manpower's (2016) report on administrative professionals, employers have to take a leading role in reskilling their current workforce, to meet the changing skill set on demand (Deloitte, 2016; Lanfear, 2012; World Economic Forum, 2016).

The impact of artificial intelligence on administrative and routine white-collar office functions has led to immense skills depletion. Therefore, a different skill-set and thinking process are required for their future roles. Advances in technology have facilitated and automated many of the traditional tasks and functions of the administrative professional and have had a significant impact on the assimilation, processing and utilisation of information. Considering that the 4IR is driven by extreme automation and connectivity through artificial intelligence, administrative professionals should prepare for the future. They could obtain a skill set that is beyond current interpersonal and technical skills, to enable them to compete in today's high-tech world (CFA Business Skills @ Work, 2012; IAAP Benchmarking Survey, 2013; OfficeTeam Survey, 2012; Valente, 2017; World Economic Forum, 2016). The roles and duties, which are diversifying, require that administrative professionals develop new ways of thinking in the new world of work. Venter (2011) investigated the ideal profile of preferred thinking styles required by the contemporary administrative professional. The results revealed that for administrative professionals to perform effectively in the new developing world of work, it is necessary to develop from the current predominantly left-brain thinking preference to become whole-brain thinkers by incorporating right-brain thinking.

Whole-brain thinking equips a person to develop the skills to interpret managerial styles, as well as to resolve business problems pertaining to production, planning, communication, teamwork and reaching goals. Whole-brain thinking also provides an invaluable basis for understanding processes of thinking and the interrelation of knowledge, skills and competence (Herrmann & Herrmann-Nehdi, 2015; Neethling & Rutherford, 2005). Herrmann (1995) asserts that the 'competence to perform a given task comes through training and experience and can be developed to reasonable, even superior levels whether or not the person is attracted to that task'. Thinking that is associated with the whole-brain concept (Herrmann & Herrmann-Nehdi, 2015) emerged in research by the World Economic Forum (2016), which has found that an immense disruption of skills has arisen from the onset of the Fourth Industrial Revolution. Considering that the global key demographic and economic drivers of change continuously change the context of employment, this paper explores the future knowledge and skills requirements of South African organisations to thrive in the new working environment for the next 10 years.

2. Literature Review

Dramatic progress in economic characteristics is visible worldwide, and it is driven by the impact of the revolutionary development of information and communications technologies over the past decade. Owing to the recent information and communications technology developments of the 21st century, it has become apparent that individuals, businesses, educational institutions and government policymakers should rather demonstrate foresight in navigating this rapidly shifting landscape to forecast future trends (Davies, Fidler & Gorbis, 2011; Silke, 2011). The rapid transition between economies plays a pivotal role in the rise of research institutions such as the African Future Project, which collaborates with the Institute for Security Studies and the Institute for Futures Research, located at Stellenbosch University. These research institutes promote exploration and identification of emerging trends and policy interventions, including human capability development and sustainability (Cilliers *et al.* 2011). However, it has become increasingly difficult to forecast future trends, even within 10 years, owing to the rapidly shifting landscape. Davies *et al.* (2011) forecasted trends in the year 2011 for the next 10 years, but Quilligan (2015), UBS (2016) and the World Economic Forum (2016) have since announced that the world is facing a 4IR. Research conducted by the World Economic Forum (2016) revealed that concurrent to the technological revolution is 'a set of broader socio-economic, geopolitical and demographic drivers of change, each interacting in multiple directions and intensifying one another' (World Economic Forum, 2016).

Although South Africa is a young participant in these global trends, the key drivers of change will have a significant impact on the current political and economic dialogue. Recognising the impact of changing economic structures on the future will continue to increase South Africa's ability to grow globally, by placing a competitive impetus on all South Africans (Cilliers *et al.*, 2011; Fear, Botha, Young, Rautenbach & Groenewald, 2009; Silke, 2011). Further results emerging from the World Economic Forum (2016) survey reveal that South Africa is facing the following perceived barriers in terms of change management and future workforce planning: 'insufficient understanding of disruptive changes, resource constraints' and the fact that

the workforce strategy is not aligned with an innovation strategy. According to the World Economic Forum report cited above, South Africa is seen as embarking on the following workforce and change management strategies to meet the talent and skills challenges arising from expected business model disruptions: to invest in reskilling current employees, to target female talent and to support mobility and work rotation.

The Department of Higher Education and Training compiled the National Skills Development Strategy III (NSDS III) Progress Report 2011–2016 to serve as a key driving force in improving the effectiveness and efficiency of the skills development system. It also promotes partnerships between employers and public educational institutions (including technical and vocational education and training colleges, universities, universities of technology, private training providers, and sector education and training authorities) (National Skills Development Strategy III (NSDS III) Progress Report 2011–2016; Skills Development Facilitator Guide, 2013). In an attempt to address the impact of the key drivers of change on the re-skilling of the South African workforce, one of the African Agenda 2063's aims is to transform the education and skills revolution by promoting science, technology, research and innovation. This transformation will build knowledge, human capital, capabilities and skills required to drive the African century innovations (African Union Commission, 2015).

Burton and Shelton (2014), CFA Business Skills @ Work (2012), Lloyd (2010), the IAAP (2013), Rorbak (2012) and Valente (2017) concur that artificial intelligence has led to immense skills depletion. However, they also point out the impact of technology advances that have prompted a shift in the workplace structure in terms of tasks that are more complex, demanding and technical, together with reassignment of management responsibilities. The level of workplace autonomy and authority has consequently had a significant impact on the assimilation, processing and utilisation of information. The 4IR is driven by extreme automation and connectivity through artificial intelligence. Administrative professionals should therefore prepare for the future by obtaining a skill set that is beyond current interpersonal and technical skills, to enable them to compete in today's high-tech world (CFA Business Skills @ Work, 2012; IAAP Benchmarking Survey, 2013; OfficeTeam Survey, 2012; Valente, 2017; World Economic Forum, 2016). Accompanying these significant rapid transitions between economies, a different way of thinking is required, which has already influenced people's careers and lives. Societies have evolved over four industrial revolutions, from a group of farmers to consumers sharing their experiences in a knowledge-based society. This transition between economies has also brought about a different way of thinking. Left-brain thinking dominated the agricultural economy, the industrial economy and the information age, for activities that ranged from quality and productivity to acquisition and application of theoretical and analytical knowledge to increased quality in goods and proficiency in services (Bloem, Van Doorn, Duiverstein, Excoffier, Maas & Van Ommeren, 2014; Clark, 2005; Ferreira & Teixeira, 2013; Herrmann, 1995; Hosany & Witham, 2010; Howes, 2016; Kamel, Melo, De Souza, Lima & Lopes, 2008; OECD, 2000; Pine II & Gilmore, 1998, 2001; Pink, 2005; Pompidou, 2007; Rowson & McGilchrist, 2013; Seltzer & Bentley, 1999; UBS, 2016).

A diverse set of skills, which reflects right-brain thinking, came with the rise of the experience economy, which transitions from the conceptual age to the economic realm of relationships. New technologies engage customers with experiences that involve and create emotions and affective memories. Different dimensions of sensory, social and spiritual stimuli provide holistic and long-lasting personal experiences to clients. The emotional response of the creators and empathisers in delivering a service, appeals to the limbic system, and consequently to the right brain, which controls the limbic system. Skills such as empathy, creativity and storytelling were required for the conceptual age (Ferreira & Teixeira, 2013; Herrmann, 1995; Hosany & Witham, 2010; Kamel *et al.*, 2008; Pine II & Gilmore, 1998). The rise of social media gave brands and consumers a variety of platforms for conversations and connections, thus a different means of communication and social skills (Huitt, 2007; Pink, 2005; Smith, n.d.; Stanfield & O'Hare, 2013). Thinking associated with whole-brain thinking emerged in research by the World Economic Forum (2016), which has found that there is an immense disruption to skills, driven by extreme automation and connectivity through artificial intelligence, which has set the stage for the sharing economy (the 4IR). This has implications for the skill set, which includes social and cognitive abilities as well as technical skills, resource management, processing (e.g. active listening, critical thinking and monitoring self and others), content skills (e.g. active learning, oral expression, reading comprehension, written expression, information, communication and

technology literacy), system skills (such as judgement and decision-making, and system analysis) and complex problem-solving abilities. In addition, for the workforce to be successful, it needs to go beyond these skills, namely to be flexible and to be able to adapt to change (Anderson & Rainie, 2012; Bloem *et al.*, 2014; Herrmann & Herrmann-Nehdi, 2015; Quilligan, 2015; UBS, 2016).

Figure 1: A guide for the key drivers of change (Adapted from Burton & Shelton, 2014; Davies *et al.*, 2011; World Economic Forum, 2016)

LIFELONG LEARNING SKILLS	FUTURE WORK SKILLS 2020	WORKFORCE STRATEGY FOR THE FOURTH INDUSTRIAL REVOLUTION
• **BASIC WORKPLACE SKILLS** • Technology • Operation of systems • Manage information • Locate and use resources • **BASIC WORKPLACE KNOWLEDGE SKILLS** • Thinking skills • Reading skills • Writing skills • Mathematical operations • Listening skills • Speaking skills • **PERSONAL QUALITIES** • Be responsible • Be dependable • Be a self-starter • Positive self-esteem • Social adaptability • Exhibit self-management • Display integrity/honesty • Project a pleasant personality • Show your human side • Project a professional image • **INTERPERSONAL SKILLS** • Teamwork • Recognise individual differences • Work with difficult people • Understand conflict resolution • Teach others • Offer exceptional customer service • Exercise leadership • Effective negotiation • Embrace constructive criticism • Respect diversity • Recognise office politics • A keeper of confidences • Cope with change • Cope with stress • Display good manners	• **DRIVERS: DISRUPTIVE SHIFTS RESHAPING THE WORKFORCE LANDSCAPE** • Extreme longevity • Computational world • Superstructed organisations • Rise of smart machines and systems • New media ecology • Globally-connected world • **KEY SKILLS NEEDED IN THE FUTURE WORKFORCE** • Sense-making • Novel and adaptive thinking • Social intelligence • Computational thinking • Transdisciplinary • New media literacy • Cognitive load management • Design mindset • Virtual collaboration • Cross-cultural competency	• **DEMOGRAPHIC AND SOCIAL FACTORS** • Changing nature of work, flexible work • Middle class in emerging markets • Climate change; natural resources • Geopolitical volatility • Consumer ethics; privacy issues • Longevity; ageing societies • Young demographics in emerging markets • Women's economic power, aspirations • Rapid urbanisation • **TECHNOLOGICAL FACTORS** • Mobile Internet; cloud technology • Processing power; big data • New energy supplies and technologies • Internet of Things • Sharing economy; crowdsourcing • Robotics; autonomous transport • Artificial intelligence • Advance manufacturing; 3D printing • Advance materials; biotechnology

The characteristics of the new world of work, known as the 'key drivers of change', served as a guide to test the impact of the global and the national key drivers of change and transformation on the application of new knowledge and skills of administrative professionals in a South African context. The guide, as illustrated in Figure 1, was adopted from Burton and Shelton (2014), Davies *et al.* (2011) and the World Economic Forum

(2016) to constitute a framework of the emerging key drivers of change that transform the global society and marketplace. The results of Venter's (2011) investigation into the ideal thinking style preference profile of the administrative professional revealed that the preferred thinking styles of administrative professionals might be inadequate for performing effectively in the newly developing world of work. What also emerged is the need for them to develop from a predominantly left-brain thinking preference, namely goal and task driven, to become whole-brain thinkers, by incorporating right-brain thinking, such as people and vision driven, in executing their roles effectively. Thus, left-brain thinking needs to be complemented by right-brain thinking in order for the administrative professional to function more effectively in the new world of work.

Whole-brain thinking equips a person to develop the skills to interpret managerial styles, as well as to resolve business problems pertaining to production, planning, communication, teamwork and reaching goals. It also provides an invaluable basis for understanding processes of thinking and the interrelation of knowledge, skills and competence (Herrmann & Herrmann-Nehdi, 2015; Neethling & Rutherford, 2005). The brain constantly changes when it learns a new skill set, for example a technical or a financial skill. Once the process of thinking is understood and utilised to support and enhance the effectiveness of employees, problem solving, innovation, communication and achieving individual and company goals will be promoted. Professionals will be able to adapt to the continuous pace and the extent of change more effectively, and they will have access to the different thinking styles that could provide appropriate responses to changing situations. Although individuals choose to solve problems in their preferred thinking style, access to all the thinking styles is necessary to solve more complex problems. Individuals can adopt different thinking styles according to different tasks and situations. Whole-brain thinking encourages a person to complement less preferred thinking style preferences, instead of disregarding the lack of necessary skills, which may cause anxiety and stress. Furthermore, the new world of work encourages a shift within educational institutions and the workforce. The historically separate worlds of work and learning originally focused on predominantly left-brain thinking and teaching. This was evident in the service economy, where knowledge workers excelled in left-brain thinking and were distinguished for their ability to acquire and apply theoretical and analytical knowledge (De Boer *et al.,* 2015; De Boer & Van den Berg, 2001; Harypursat, 2005; Herrmann, 2005; Herrmann International, 2014; Jensen, 2007; Kruger, 2008; Neethling & Rutherford, 2005; Pink, 2005; Samuel & Kohun, 2010; Sternberg, 1994; Van Niekerk, 2007).

THEORETICAL FRAMEWORK
Considering that the purpose of this study was to discover and interpret the impact of the global key drivers of change on administrative professionals for effective performance in the changing world of work from a whole-brain perspective, the relevant key whole-brain human information processing theories were considered. These theories include Herrmann's Whole Brain® Model (Herrmann, 1996; Herrmann & Herrmann-Nehdi, 2015), Taggart's whole-brain human information processing theory (Taggart, 1980; Taggart & Valenzi, 1990; Taggart, Valenzi, Zalka & Lowe, 1997), Sternberg's theory of thinking styles (Sternberg, 1990, 1994) and Kirton's model of cognitive style (Cassidy, 2004; Coffield, Moseley, Hall & Ecclestone, 2004; Kumar, 2014; Stum, 2009). Consequently, Herrmann's Whole Brain® theory has been chosen, given that the characteristics of the theory mainly encourage whole-brain development. Herrmann's Whole Brain® theory will thus serve as the conceptual framework for this study, with the aim of constructing a future-focused whole-brain success profile.
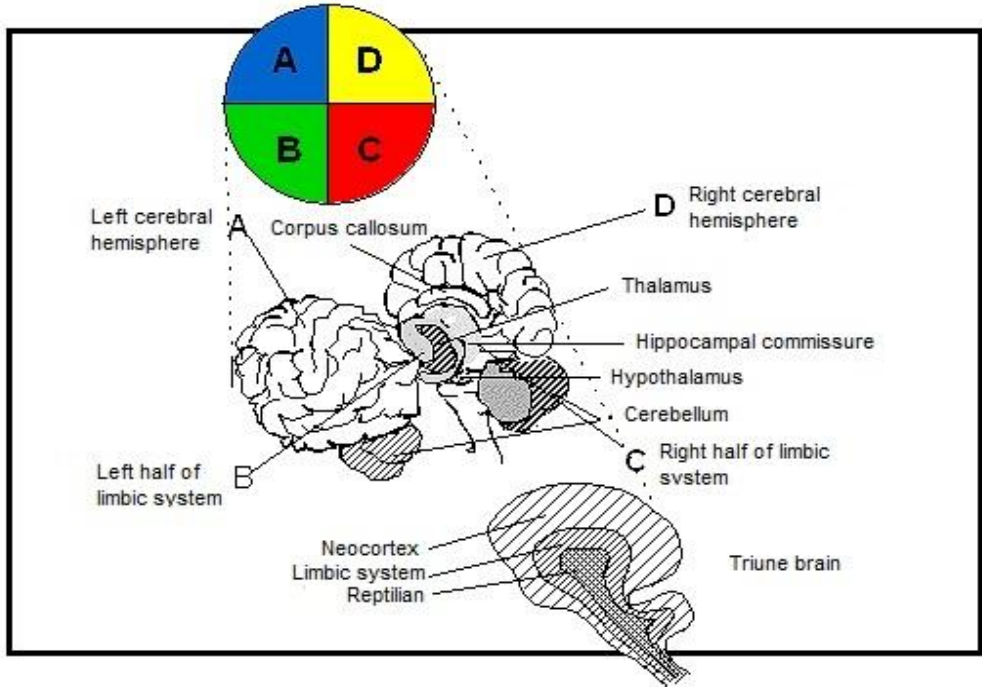
In addition, Herrmann's Whole Brain® theory has been chosen as he is acknowledged in the literature as the father of brain dominance technology (De Boer, Du Toit & Bothma, 2015). Furthermore, Herrmann's research provides a valid approach towards a theory for understanding how the brain processes information. He illustrates this through the Four Quadrant Model, which presents four modes of thinking and learning, not only two hemispheres, and is based on the Whole Brain® theory, which consists of the following three key concepts (AlGhraibeh, 2015; Herrmann, 1995):
- Thinking styles are featured as neither good or bad, right or wrong;
- The thinking style shows a preference for mental activity that is quite different from the efficiency of performing that activity; and
- Thinking styles tend to be constant over time.

Application of the model can harness cognitive diversity, such as improving the efficiency of teams and individuals, and for better problem solving, decision-making, communication and management. The model is holistic and has factorial and construct validity when applied in the fields of business and education. Moreover, the Whole Brain® theory promotes professional development, by encouraging the development of less preferred thinking styles. Consequently, Herrmann believes that thinking style flexibility will support responses to meet particular situational demands. Herrmann's Whole Brain® Model and the Herrmann Brain Dominance Instrument (HBDI) represent one of six recommended models in education and training. Furthermore, the Herrmann whole-brain approach provides evidence that using multiple thinking styles promotes deep learning and enables students to develop to their full potential (Coffield *et al.*, 2004; De Boer, Du Toit, Scheepers & Bothma, 2013; Herrmann, 1995; Herrmann & Herrmann-Nehdi, 2015; Martins, 2015).

The triune brain theory and the left brain/right brain theory facilitated the development of Herrmann's Whole Brain® Model. Popularisation of this theory was informed by clinical evidence provided by Robert Ornstein, Roger Sperry, Joseph Bogen and Michael Gazzanaga. The left and the right hemispheres of the brain communicate with each other by means of connectors called the corpus callosum, the hippocampal commissure and the anterior commissure. Herrmann combined the elements of MacLean's triune brain model and Sperry's theories into a four-part model representing the Whole Brain® Model. The four-quadrant model therefore serves as an organising principle of how the brain works, namely that the four thinking styles metaphorically represent the two halves of the cerebral cortex (Sperry) and the two halves of the limbic system (MacLean). As illustrated in Figure 2, the cerebral mode represents the cognitive modes associated with the cortex, demonstrating quadrants A and D of Herrmann's Whole Brain® Model. Quadrants B and C represent the more visceral, emotional modes associated with the limbic system (Herrmann, 1996).

Figure 2: The triune brain theory combined with the left brain/right brain theory, which emerged into the concept of the four quadrants (adapted from Herrmann, 1996)

The above explanation of the Whole Brain® theory serves to interpret the results of the study and to construct a future-focused whole-brain model. Herrmann's Whole Brain® Model also forms the core of a future-focused whole-brain model, as illustrated in Figure 3.

Figure 3: Core of the future-focused whole-brain model
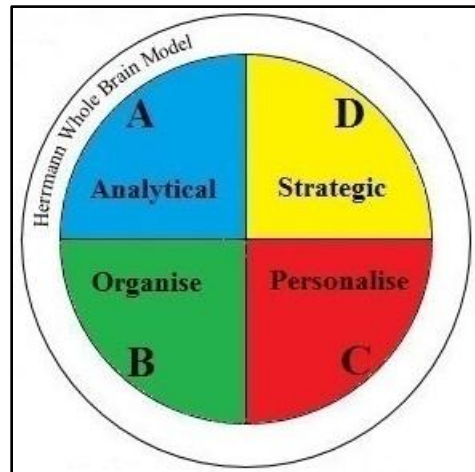
As explained in the literature review, the rapid economic developments of the past decade have had an irrevocable impact on the set of skills and thinking processes of administrative professionals, who are expected to apply 20th-century skills and knowledge in a new world of work. Therefore, administrative professionals have to adjust from the role of executing duties on the instruction of the manager, as was expected in the service economy, to the demands of the experience economy, namely skills of innovation and creativity. The relationship economy has prompted a shift towards another transformation, namely interpersonal and intuitive skills. Consumers are sharing their experiences of the trademarks and services on social media. Therefore, social media create a different platform for administrative professionals to communicate and connect with clients. Flexibility and adaptability are skills required not only for the sharing economy, but also with the transition into the Fourth Industrial Revolution, which is driven by extreme automation and connectivity through artificial intelligence. Administrative professionals should obtain a skill set that is beyond that of functional skills to execute their role effectively.

3. Research Design and Methods

Research approach
For the purposes of this paper, the researchers only used the qualitative data that was gathered by means of semi-structured interviews to investigate the perspectives of stakeholders regarding the required future skills of the administrative professional. In addition, we made use of the data extracted from the open-ended questions in the survey completed by 219 respondents. The research was conducted in three phases. In phase 1, an international and national investigation was conducted through e-mail enquiries to various international and national associations for administrative professionals, to identify the current skills and knowledge gaps. Phase 2 consisted of a review of the literature to uncover the gaps in knowledge and the lack of skills according to the mental preferences of Herrmann's Whole Brain® model. Phase 3 produced the quantitative data derived from a structured survey questionnaire, together with the qualitative data emanating from the semi-structured interviews. The data-gathering process was followed to construct a future-focused whole-brain model to demonstrate the impact of the global key drivers of change for optimal effectiveness of the administrative professional in the future world of work.

Research participants
Only phase 3 included participants. From a sample of 354, a total of 219 responses were received, which represents a response rate of 62%. Members of the Association for Office Professionals of South Africa (OPSA) completed the questionnaire online. Analysis was undertaken using descriptive statistics to source the primary data. Qualitative content analysis was adopted to analyse the qualitative data, which had been obtained by means of semi-structured interviews to investigate the perspectives of an education and training professional, a manager, an academic advisory committee member, a member of an association for

administrative professionals and a curriculum practitioner regarding the required future competencies and capabilities of the administrative professional.

Measuring instruments

The instrument for phase 3 was a questionnaire that gathered data based on the national skills survey, which were identified from the quantitative findings, as well as the future skills requirements, which were derived from the semi-structured interviews. The questionnaire was divided into three sections. Section A elicited biographical information, such as age, geographical location of employer, current position, duration of current or related work experience, industry, professional membership, highest level of education and enrolment status. Section B was compiled based on the data emanating from the international investigation (phase 1), future-focused models, such as the Future Work Skills 2020 of Davies *et al*. (2011) and Burton and Shelton's (2014) Lifelong Learning Skills, and a literature review. The visual analogue scale (VAS) was applied to this section (Green & Taylor, 2009; Hasson & Arnetz, as cited in Musangu & Kekwaletswe, 2012; Svensson, 2001). This section had the following categories, where the number of questions for each category ranged from four to five:

- Office administration and organisational and time management;
- Information and communication technology;
- Management of meetings;
- Communication;
- Interpersonal skills, such as team working, project and event management, supervising of staff, conflict resolution, public relations and customer service/relations;
- Thinking skills, such as problem solving, commercial awareness, personal commercial awareness development and outside-the-box/innovative thinking;
- Personal qualities, such as social adaptability and self-management; and
- Emotional intelligence.

Section C consisted of the following two open-ended questions:

- 'Are there any other skills that you regard as essential skills for future success that are not mentioned in the questionnaire?'; and
- 'In which of these do you need development?'

A total of 219 administrative professionals responded, and all responses were kept confidential. From the target population (N = 354), a pilot test was performed with 10 respondents over a wide geographical area.

Inferential statistics

The statistical hypothesis tested the relationship between the demographic profile of administrative professionals in South African companies and the current level of knowledge and skills. The findings revealed that there was a significant relationship between the following:

- **Age** and office administration, organisational and time management, information and communication technology, and web-based applications; and
- **Length of service** and office administration and organisational and time management.

Table 1: Relationship between age and items

Item Description of Null Hypothesis	p-value
The distribution of **office administration and organisational and time management** is the same across categories of age	0.038*
The distribution of **information and communication technology** is the same across categories of age	0.023*
The distribution of **web-based applications** is the same across categories of age	0.011*

Table 2: Relationship between length of service and items

Item Description of Null Hypothesis	p-value
The distribution of **office administration and organisational and time management** is the same across categories of tenure	0.018*

Research Procedure
For the quantitative data collection, the questionnaire was distributed electronically by OPSA to their members through their Terrific Tuesday newsletter. Qualitative data was gathered by means of semi-structured interviews conducted with a small number of stakeholders, namely an education and training professional, a manager, an academic advisory committee member, a member of an association for administrative professionals and a curriculum practitioner. The interviews addressed the main categories of Section B of the questionnaire with the following leading question: 'Taking the current and future global and national changes in the work environment into consideration, how do you envisage they will impact on the mindset and skills requirements for the administrative professional in order to remain effective within the next 10 years?'

4. Data Analyses

The results obtained from the survey questionnaire, phase 3, were analysed by means of descriptive statistics, which employed the Statistical Package for the Social Sciences (SPSS) (Couper, Tourangeau, Conrad & Singer, 2007). The descriptive statistics, in this instance the mean value, were obtained from the interval-scaled items of the current knowledge and skills in category B. Frequencies were analysed, together with inferential statistics. A Cronbach's alpha analysis and tests for significant differences were performed. With regard to category C, the raw data for the two open-ended questions were extracted from SurveyMonkey™ into an MS Excel spreadsheet, to count and calculate the frequencies, after which the responses were categorised according to the themes in the questionnaire. Regarding the analysis of the qualitative data by means of qualitative content analysis, eight main themes and related sub-themes of the semi-structured interview questionnaire emerged from the structured questionnaire. The entire transcribed text was arranged into themes and categories with the assistance of Atlas.ti™ Version 8, according to codes.

Ethical Clearance
Ethical clearance for the study was obtained from the Research Ethics Committee of the Faculty of Business and Management Sciences. Written consent was obtained from an association for administrative professionals, namely the Association for Office Professionals of South Africa (OPSA), that they would distribute the questionnaire to their members on behalf of the researchers for the quantitative data-gathering process. OPSA provided the hyperlink to the SurveyMonkey™ website in emails. Participants agreed to participate in the survey by online implied consent.

Limitations
Distribution of the survey questionnaire was a time-consuming process. One of the co-authors distributed the letter of informed consent to the CEOs of three professional associations. The professional association had to send out numerous reminder emails for completing the pilot study as well as for the comprehensive survey, and the window period consequently had to be extended. In view of the fact that the greatest participation in the survey was limited to one province, greater participation in the other eight provinces would have added value to the study. Another limitation was that the study was based on a self-assessment (the respondents' own perception of their current proficiency), and not an assessment of skills. The low response rate from the target population can also be considered a limitation of the study.

Findings
Phase 3
Quantitative data
In Table 3, the results of the current level of skills and knowledge are ranked in descending order of the mean score. It is noticeable from the summary that the respondents indicated their skills as relatively high on the VAS, except in the category of web-based applications, which yielded a relatively low value compared to the

other categories. In brief, the national skills survey conducted among administrative professionals in the private and the public sectors determined the current gaps in competencies and capabilities to comply with the future world of work. Phase 3 of the data-gathering process was thus based on the skills and knowledge gaps that emerged from the national skills survey and the semi-structured interviews. It is evident that the results of the national perspective obtained from the skills survey are not consistent with the results from the international investigation and the literature study. Overall, there appears to be no shortage of skills in the South African context. Thus, the respondents are of the opinion that they are up to standard as far as future skills requirements are concerned. The only skills shortages identified were in the category of web-based applications, since these responses recorded the lowest overall mean value, namely 5.3190.

Table 3: A summary of the mean values for all the categories

	N	Minimum	Maximum	Mean	Standard deviation
Emotional intelligence	157	3.25	11.00	9.2935	1.24713
Personal qualities	181	3.75	11.00	9.2868	1.43781
Communication	192	4.00	11.00	9.2500	1.48289
Interpersonal skills	192	4.53	11.00	8.8432	1.32089
Office administration and organisational and time management	201	4.00	11.00	8.6493	1.41442
Thinking skills	190	3.77	11.00	8.5130	1.43284
Management of meetings	195	1.00	11.00	8.2751	2.08222
Information and communication technology	199	3.60	11.00	8.1731	1.58821
Web-based applications	198	1.00	11.00	5.3190	2.62369
Valid N (list-wise)	157				

In the category of information and communication technology, some skills are regarded as not necessarily skills gaps but gaps that may hinder the respondents in the future world of work, since these items had lower mean values. These items are electronic records management (7.92), social networking sites (7.83), Internet phone services (7.43) and conducting research (7.20). According to the literature, these technology skills are vital skills for the future world of work. It is important to note that the results obtained are a reflection of the respondents' self-assessment of their level of proficiency in these skills categories. A performance-based assessment might have yielded different results.

Taking into account the impact of future skills requirements, as reflected in the guides for the key drivers of change (see Figure 1), it can be deduced that future skills requirements have not had a negative impact at national level. Although no significant knowledge and skills gaps are perceived, according to the results of the national skills survey as illustrated in Table 1, it has been found that the mentioned skills will continue to be important skills to remain effective in the next 10 years. It can be assumed that at the rate at which technology changes, gaps in skills are most likely to arise, considering the feedback received from the open-ended questions regarding the increasing need for additional training or training at an advanced level, or for the purposes of improving current skills. Considering the relatively low mean (5.3190) (see Table 1) for the category of web-based applications, namely 24.02%, as well as for demand for training, it seems that skills in web-based applications are regarded as a gap.

Qualitative data
To provide context with regard to the requirements for the future knowledge and skill set, some of the key perspectives under the relevant themes that support the perspectives obtained in the national survey questionnaire are displayed in Table 4.

Table 4: Summary of frequency distribution and codes

THEME	CATEGORY	CODE	FREQUENCY
Office administration and organisational and time management	N/A	Technology at your fingertips	9
		Adapting to global changes	8
Information and communication technologies	N/A	Computer skills as a necessity	4
		Global changes and adaptability	4
		The fall of the third party	4
		Collaborative software	2
		Demise of the textbook era	2
		Skilled administrative personnel	2
Management of meetings	N/A	Online collaborative information processing	6
		Automated systems for minutes	5
		Formal agendas as key responsibility	3
		Virtual meetings as the way forward	3
		ICT knowledge of the utmost importance	1
		Minutes as future record-keeping process	1
		Online collaborative tools	1
Oral, written and interpersonal communication to convey and articulate knowledge and information in effective and appropriate ways to meet everyone's needs	N/A	Digital software assistance	6
		Importance of communication skills	3
		Professional oral communication	3
		Technology depersonalises human interaction	3
		Online migration	2
		Administrative professional as first-line contact	1
Interpersonal skills	Teamwork and project and event management	Teamwork as a critical skill	5
		Problem-solving skills	4
		Event management as a critical skill	4
		Interpersonal skills are critical	2
		Responsibility to coordinate between divisions	2
		Teamwork on SharePoint	2
Interpersonal skills	Supervising staff which contributes towards improved workflow	Supervising staff to be skilfull	4
		Emotional intelligence as a crucial skill for communication purposes	2
		Sharing of information	2
Interpersonal skills	Managing conflict to promote effective working relationships	Managing conflict online	3
		Professional communication	3
		Office politics as an element of conflict	1
		Power relations as problematic	1
Thinking skills	Problem-solving skills to contribute towards productive outcomes	Problem-solving skills	6
	Knowledge of commercial awareness	Commercial awareness	5
	The development of personal commercial awareness	Proper training in commercial awareness	6
		Awareness of working context	2
		Aware of social footprint	1
Thinking skills	Outside-the-box/innovative thinking	Space for innovative thought	4
		Teaching innovative thinking	4
Personal qualities	Socially adept	Personal qualities as a crucial factor for adaptability	7
		Adaptability is crucial for one's career	4
	Independence and self-management	Self-management is essential	5
		Independence is essential	3
Emotional intelligence	N/A	EI is crucial for communication processing	7
		Technologies as a barrier for EI	3

It is apparent from Table 4 that the code **'technology at your fingertips'** refers to the office professional who is able to accomplish much more as a result of new technology, as is evident from some of the responses, such as *'your executive professional has at her/his fingertips much of the support that was provided personally by a human being'*. This is also the case with the code **'adapting to global changes'**, as is evident from the following response:

> *[Y]ou don't even have to be in a specific office; you can work from home. You need to change to accept all the national changes, the future global changes.*

The code **'online collaborative information processing'** relates to the process of sending minutes, arranging agendas and collaboration on an online platform that will be readily available for any stakeholder involved in the process, and it is expressed in the following opinions:

> *[I]t needs to be sort of virtual. You actually have to bring your laptop to the meeting, if you are not zooming or Skyping from somewhere.*
>
> *[P]ut it in the border of the email as an attachment, and it returns to the administrative professional as compiled. After the meeting copy each individual item that requires action on the 'Task request' of MS Outlook, and delegate to the respective individuals.*

Table 4 indicates the codes that refer to the use of **digital software** that will **assist** the administrative professional in the work that they pursue, for example '*looking into applications such as "Speechnotes"'*, which is described as a '*speech-to-text online notepad*'. With this process comes a sense of easing the hard labour of language translation, since '*it will be digitised. Computers will actually handle the communication*'.

The code **'teamwork as a critical skill'** is one of the key elements that the administrative professional has to possess in her line of work, as expressed in the following responses:

> *Now we have to work as a team, and there is so much power in a team, if you can just get it right, working together as a team and be open to your teammates, understanding the cultural differences of your teammates.*
>
> *Teamwork is important, because if you don't operate as a team, it can get difficult. You've got to work together to get things done.*

The code **'problem-solving skills'** refers to administrative professionals having the ability to solve problems in relation to the work done by their executives, as expressed in the following quotes:

> *[...] traditional roles that become obsolete. This is an example where the new niche area would be found. The busy executive is dealing with multiple matters. The administrative professional must be able to recognise a problem. It is a new level of problem solving. It is more than, for example, why something has not been delivered at a particular time.*
>
> *Administrative professionals of the future require problem-solving skills to survive the office of the future, have to have the knack to solve problems, irrelevant of the industry and era. Where people are involved, problems have to be resolved.*

Table 4 reflects the code that refers to the **need** for an administrative professional to possess **personal qualities** that will assist in **adapting** to the changing environment. One should have the initiative to adapt to change, and one should have the personality, the motivation, and the contextual knowledge to be able to adapt to any change that will occur in the future:

> *[Y]ou must be able to change. Actually, if you are already in such a situation, the changes are coming to you, that you don't look for. You do look for change, but the change is coming to you. So if you don't adapt to all the changes around you, you are staying behind.*
>
> *This becomes the distinguishing feature of the administrative professional of the future. Technology will replace the bulk of the work, and [we] will now look at intuition, where a person is able to look at a situation and judge the dynamics of that situation.*

The codes relating to the **importance of emotional intelligence** in the work context are expressed in the following responses:

> *You got to have a little bit of empathy in place. Not everybody is going to come to work in a good mood. You are going to get the people that are very emotional about certain things, and people that aren't. You got to learn to adapt. You got to learn to adapt to people's emotions. [...] But it is important to know when somebody is having a bad day. Leave them alone. Get them a cup of coffee. Make them feel better, you know. Step back and see the bigger picture.*

The emphasis was also placed on the importance of managing emotions, since

> *emotional intelligence is that one anchor that you actually need to survive in the next 10 years. If you are not emotionally intelligent… You work in a political sensitive environment. You work in a disruptive economy. You have to manage and keep those emotions under the bottle cap.*

The findings of this study can now be summarised by means of the future-focused whole-brain model as illustrated in Figure 4. It is evident that the key skills for the future success of the administrative professional involve proficiency to function from all quadrants of the whole-brain model. Of specific importance are the skills of flexibility and adapting to change, which are categorised in quadrant D.

According to Herrmann's Whole Brain® theory, Quadrant D thinking is considered to be important for administrative professionals, since this implies being innovators, who are intuitive, holistic, conceptualising, adventurous, and risk taking. All these skills are highlighted by the literature as being important for the future success of administrative professionals. Furthermore, opportunities that will arise as a result of technology trends will be flexible working arrangements, telecommuting, co-working spaces, virtual teams, freelancing and online platforms. These emerging technology trends, namely Mobile Internet, cloud technology, big data analytics and the Internet of things, will have a significant impact on the administrative professional's skill set, as evidenced in the data derived from the national skills survey. The need for training regarding web-based applications, along with data presentations, underscores the impact that technology trends have on future skills requirements. Skills with regard to computer literacy are categorised in Quadrant A that promotes thinking such as what needs to be known (knowledge), when analysing and learning a new computer program for it to be effective in applying the required technical skills. These skills are highly valued. The need for training in presentation and leadership skills also emerged. This need for training in presentation is obvious in view of the emerging skills requirements in data-based analysis and presentation. The need for leadership skills is related to the new emerging role of the administrative professional, namely supervision and training of co-workers.

Leadership skills are embedded in the dimension of training and mentoring, and are categorised as Quadrant C. Thinking processes in the bottom right quadrant, Quadrant C, promote communication, helping, supporting and social skills.

Table 5: Training requirements for skills mentioned in the questionnaire

Skills according to category	Frequency	Percentage
Web-based applications	37	24.02
Thinking skills:	17	11.03
Problem solving	3	1.94
Commercial awareness	4	2.59
Personal commercial awareness development	2	1.29
Innovative thinking	4	2.59
Total	**30**	**19.5**
Office administration and organisational and time management	26	16.88
Information and communication technology	25	16.23
Emotional intelligence	21	14
Interpersonal skills:	8	5.19
Teamwork and project management	7	4.54
Supervision of co-workers	2	1.29
Conflict resolution	2	1.29
Total	**19**	**12.33**
Personal qualities:	9	5.84
Social adaptability	4	2.59
Self-management	3	1.94
Total	**16**	**10.4**
Management of meetings:	10	6.49
Minute taking	6	3.89

Skills according to category	Frequency	Percentage
Total	**16**	**10.4**
Communication:	6	3.89
Verbal	3	1.94
Written	4	2.59
Total	**13**	**8.44**

Summary of the Findings

Figure 4 displays a future-focused model for whole-brain thinking, which exhibit the impact of the revolutionary development of information and communication technology on the current work environment of the administrative professional, their future role and accompanying thinking processes. The knowledge and skills required by administrative professionals for optimal efficiency were determined during the data-gathering process, namely phases 1, 2 and 3. The knowledge and skills that administrative professionals require to comply with and perform according to the requirements of the changing world of work have been categorised as functional future skills, which constitute the first layer around Herrmann's four quadrants at the core of the future-focused model. The first layer is followed by essential future skills, with emerging future skills in the outer layer.

The four quadrants are displayed in Figure 3, namely A ('analytical'), B ('organise'), C ('personalise') and D ('strategic'), which show the different thinking preferences. The activities allocated to these four thinking profiles are as follows:

Quadrant A represents activities that involve analysing, dissecting, solving problems logically and getting facts, and these activities are preferred by the 'theorists', or the rational self. The organisers, or the safekeeping self, of **Quadrant B** prefer detailed, sequential, structured and linear activities. Activities that consider people, team participation, emotional intelligence and social and humanistic interests are represented in **Quadrant C**, and these activities are preferred by the humanitarians, or the feeling self. Intuitive, holistic, conceptualising, adventurous and risk-taking activities are preferred by the innovators, or the experimental self, of **Quadrant D** (Herrmann, 1996).

The **functional future skills** circle displays the basic skills and knowledge and the interpersonal skills that administrative professionals require to execute their work effectively, irrespective of the socio-economic, geopolitical and demographic key drivers of the change economy. It is evident that administrative professionals at the functional level already require thinking in all four quadrants.

A much different skill set from the functional future skill set is required in the circle representing **essential future skills**. A difference worth mentioning between the essential future skills layer and the functional future skills layer of Quadrant A is that a more advanced computational skill set is required in the former layer, for example audio and video technology, digital technology, system thinking, data analysis and presentation, and data-based decisions. More resources have to be allocated in the essential future skills layer of Quadrant B, namely organising time, assignments and projects, and streamlining tasks. Skills such as training and mentoring of co-workers, effective negotiation, listening skills and social and emotional intelligence are essential skills of Quadrant C. Being flexible with working arrangements, process skills, such as conceptualising and critical thinking, and novel and adaptive thinking distinguish the two layers of Quadrant D.

From the **emerging future skills** circle of Quadrant A, it is apparent that the biggest impact is in the field of information and communication technology, in terms of cloud technology, project management software and mobile Internet technology. Quadrant C shows that conflict management in terms of poor time management and communication is an emerging future skill. The emerging future skill of creating and developing a virtual corporate event is evident in Quadrant D.

Figure 4: Future-focused whole-brain model
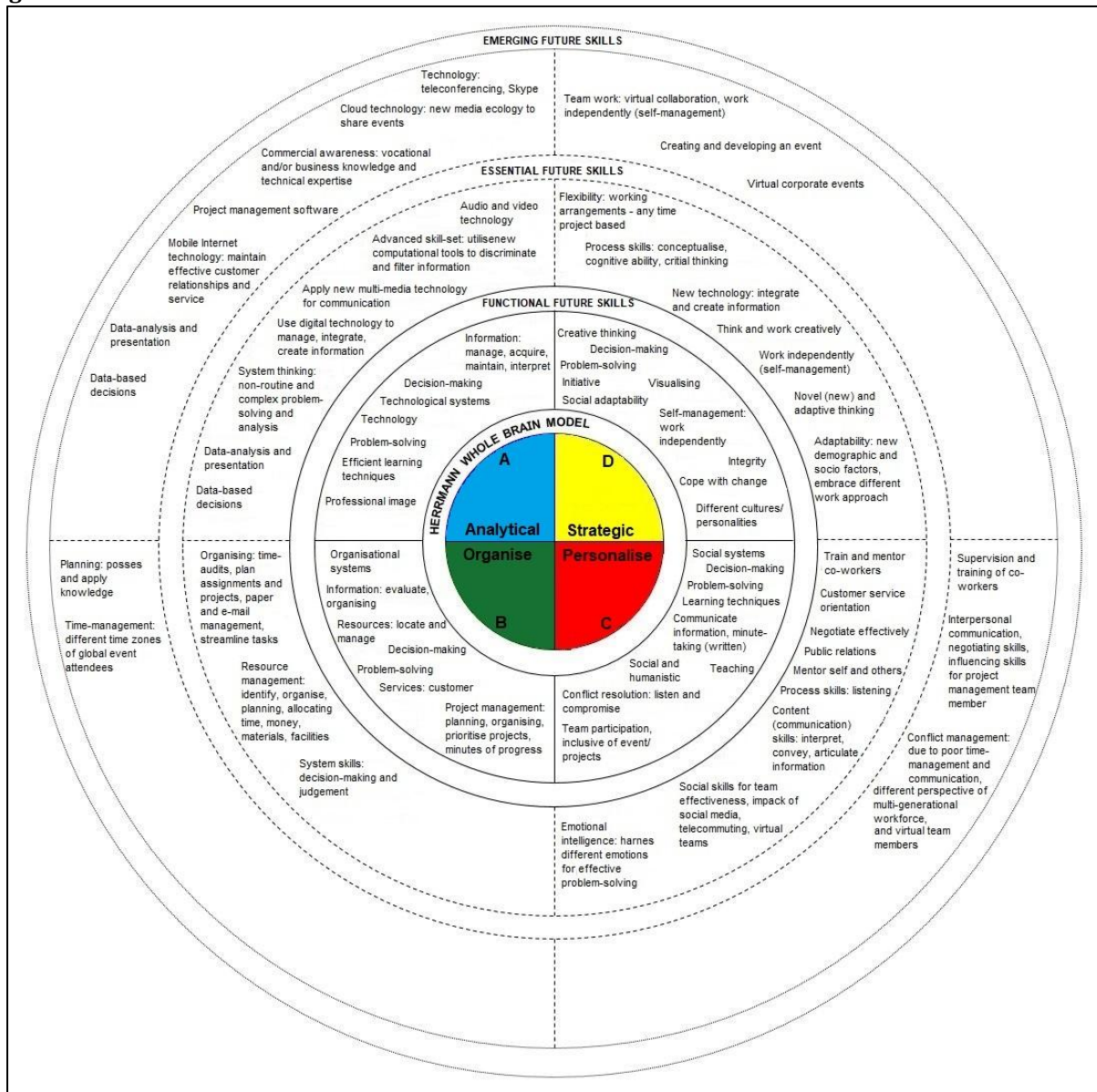
Recommendations
This section provides recommendations for curriculum development and continuous professional development.

Recommendations for curriculum development
Considering the rapid pace of technology development, and that the profession of the administrative professional is mainly skills-based, the current formal training of three years should be reconsidered. By the time the administrative professional enters the workplace, they run the risk of their trained skills already being outdated. The curriculum should be adapted to allow for shorter modular credit-bearing skills programmes in line with the latest trends in technology. This will provide administrative professionals with a more flexible approach to improve their qualifications. Bearing in mind that the highest qualification of South African administrative professionals is a diploma, this recommendation could address the need for improvement in their qualifications. As discussed in phase 1, this will align their level of qualifications with

the international benchmark, namely completing a higher-level qualification, such as an Advance or Postgraduate Diploma, to fill gaps in knowledge.

Recommendations for continuous professional development
The role of administrative professionals has definitely changed over the years, and the evidence shows that their role will continue to evolve in the future. To adapt to and manage that change, various avenues are available for professional development, for example through training courses available through their employer, work shadowing, webinars or podcasts, and attending conferences. Opportunities for continuous training and development should be provided by means of short learning programmes and refresher courses, to allow administrative professionals to acquire the necessary skills at an advanced level. This will also enable them to function and perform at an advanced level, according to their new, more challenging and diversified roles.

Of particular importance is continuous training and development in the areas of advanced web-based applications, emotional intelligence, flexibility, adaptability to change, leadership and presentation skills. These opportunities should make provision for administrative professionals' preferred methods of learning, as indicated in the survey, that is, to obtain experience in their work environment, to receive training away from the office and to receive training by means of books, articles and manuals. In this regard, application of the HBDI can assist administrative professionals to identify their strengths and the areas that they need to develop, so that they can select relevant continuous professional development opportunities. In addition to their usual responsibilities, administrative professionals are expected to take on a variety of new tasks, and they therefore require continuous professional development in these new tasks. Examples of these tasks include Internet research and market analysis, office management, marketing, human resources, finance, event management, support for multiple leaders or executives, making independent decisions up to a specified rand value, holding specific industry experience, leading a project team and managing a budget.

Conclusion
Based on the results of the study, the future-focused success profile for administrative professionals illustrates that they have to become whole-brain thinkers, incorporating right-brain thinking in order to execute their roles effectively. Thus, the future-focused whole-brain model offered by this study allows for optimal effectiveness of the administrative professional in the future world of work. In addition, owing to the focus of the study on the new world of work, the findings can be related to most occupations.

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Paper 35

Timeliness Reporting, Busy Accounting Period and Audit Pricing: Evidence from Nigeria Deposit Money Banks

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Abstract: This study assesses the effect of timeliness reporting and busy accounting period on audit pricing of Deposit Money Banks in Nigeria. Secondary data obtained from the annual financial statements of 16 listed Deposit money banks for the period between 2006 and 2017 were used for this study. Poisson Regression model was adopted to achieve the objective of the study. The results showed that timeliness reporting and busy accounting period have positive and significant association with audit pricing. This finding is in consonance with the industrial economic theory that posit that during peak accounting period (year-end), demand for audit will outstrip supply and which will eventually lead to increase in audit pricing.

Keywords: *Nigerian deposit money banks, audit fees, timeliness reporting, audit delay*

1. Introduction

The determinants of audit price are not a new concept in auditing literature. Simunic (1980) asserted that the client size, client complexity, client specific risk and auditors' characteristics are the significant factors affecting audit price. Following the Simunic model, extant literature (Wu et al., 2008; Ramadan Al Nawas & Al-Khaddash, 2013 & Zhang, 2014) exist on the audit fee, but with limited exploration of Busy season and timeliness as a catalyst of audit price, despite majority of the public firms having a year-end of 31st December ((López & Peters, 2011; 2012; Ng, Tronnes, & Wong, 2018). The study examined the relationship of the busy accounting period, timeliness reporting as its affect audit price ile in the Nigerian Deposit Money Banks.

The Banking industry is one of the most important sectors of Nigerian economy as it acts as a catalyst of economy development; several financial regulations are put in place to ensure a level playing ground and transparency of the financial reporting. For instance, in 2009 the Central Bank of Nigeria (CBN) issued a circular BSD/DIR/GEN/VOL.2/004 mandating all banks to have a common financial year end of 31st December, and also, the financial report is expected to be filed with the Nigeria Security Exchange Commission (SEC) on 31st March of the following year. The primary objective of the circular is to ensure transparency and improvement of the financial report. By this circular, the Nigerian banking industry now has a common accounting year end of 31st December from 2009. By implication, the audit resources are over stretched with the introduction of common accounting year end and filling of report on 31st march the following year, as audit seasonality and a concentrated cluster demand are created and there is limited time frame to effectively execute audit assurance service as the audit market is highly sellers concentrated and supply of statutory audit limited in the short-run. Yet, existing audit price literature in Nigeria has failed to explore the effect of busy season and report lag as determinants of audit price.

The non-inclusion of busy season and timeliness reporting is of international dimension and not limited to Nigerian banking sector audit environment. Hay (2013), Ng, Tronnes, and Wong (2018), emphasized that there are few existing literatures on audit pricing that considers the busy season in their audit fee model. Hay (2013) stated that Busy season "… is frequently not included in audit fees studies, but [when it is] the evidence shows that it is significantly related to audit fees. Several studies (Akinpelu, Omojola, Ogunseye & Bada, 2013; Soyemi & Olowookere, 2013; Ajide, 2014; Tamrat Afesha, 2015; Ajekwe, Onobi & Ibiamke, 2017) on audit fee exist on deposit money bank in Nigeria after the issuance of the circular

BSD/DIR/GEN/VOL.2/004. To the best of our knowledge none has considered the effect of audit seasonality and timeliness reporting on audit price. Consequently, this study intends to contribute to knowledge by investigating the effects of busy season, Timeliness on audit fees in Nigerian deposit money banks. The rest of the paper is organized as follows: Section 2 provides an overview of the relevant literature. Section 3 describes the data and empirical approach while Section 4 discusses the empirical results. Findings and conclusions are provided in Section 5.

2. Review of Literature

Statutory Audit
The Company and Allied Matter mandated statutory audit for every listed company in Nigeria. Statutory Audit is an assurance engagement, a product mandated by statute to be purchased and consumed by every public limited liability company to increase public confidence in the financial statement of the reporting company. The statutory audit has the following characteristics: the demand for the product is inelastic; the market is highly sellers concentrated audit market resulting to oligopolistic market with the possibility of the provider of the service exploiting its client in term of price and quality. The auditisvalued by the provider of the service at a price expected to cover the entire cost of audit engagement and also a fair proportion as profit just like any other commodity. Apart from the cost of the audit, auditors consider other factors in determining audit fee charged. Other factors that can influence the price charged are audit seasonality, also known as busy accounting period or year end and timeliness reporting.

Busy Accounting Period
Every company hasits closing year-end. The fiscal year-endchosen by an establishment is affected by the nature of the business, business seasonality, legislation, and industry norm (Sinha & Fried, 2008). Most companiesin the world have a closing period of 31st December. In the United State of American, most listed firms closing accounting period is 31st December (López & Peters, 2011; 2012; Ng, Tronnes, & Wong, 2018). In Nigeria, Uroghide and Izedonmi (2015) empirical showed that 72.28% of the company listed on the Nigerian exchange have a closing period of 31st December. Also, following the Central Bank of Nigerian regulation in 2008, mandating all licenced banks to have a uniform closing period of 31stDec, 100% of the banks have a closing period of 31st December as from 2009. Busy accounting period creates audit seasonality, and because the demand of the statutory audit is inelastic, the auditis expected to have a positive relationship (Hay, 2013; Sudaryono, 2017) this is contrary to the report of Uroghide and Izedonmi (2015) who provided empirical evidence of a negative association.

Timeliness
One of the qualitative characteristics of financial reporting is Timeliness. The financialreport should be available at the appropriate time so that stakeholders can take an economic decision.Timeliness of financial reporting is driven by the level of reliance the auditor place on the internal control of its client and regulations. When the internal control of audit client is weak, the auditor will commit more audit resources in term of audit hours, audit staff and this will have a positive effect on the time of completing the audit engagement and audit price. Timeliness is measured with the reporting lag. The reporting lag is the difference in days between the fiscal year end and the date the auditor signs the report.Archival literature in audit fee (Krauß, *et al.*, 2015) have shown that there is a positive relationship between reporting lag and audit fee

Client size
It takes a lot of audit resources to execute an audit assignment of more prominent clients. Auditing a larger audit client is costlier as this will consume a lot of audit resources like audit hours, audit personnel and even technology. Previous studies (Simunic, 1980; Eshleman & Guo, 2013; Uroghide & Izedonmi, 2015; Ilaboya, Izevbekhai & Ohiokha, 2017) showed that the audit fee is a positive function of audit price. The rationale for this is that, audit price has a functional relationship with the total cost of audit.

Client complexity
A client with higher numbers of business segments, operations, subsidiaries, foreign branches and foreign subsidiaries usually are regarded as having complex operations. It will cost the audit firm more resources to

perform audit assurance services in such firms. Previousstudies (Simunic, 1980; Kraub, Pronobis & Zulch, 2015; Urhoghide & Izedonmi, 2015; Sudaryono, 2017) have evidence that the audit fee is positively related to client complexity.

Profitability
A firm is profitable when its operating income exceeds the associated cost. The relationship between audit price and profitability is bi-directional. Some studies (Eshleman and Guo, 2013) have shown that firms with negative or high variability of performancepose a high risk of litigation to the auditors. The auditors charge high audit fee to compensate for such risk. Also, some researchers (Simunic, 1980; Hay et al. 2006) hold the view that highly profitable firms will have a highertransaction cost.

Financial Risk
The financial risk is also one of the factors that auditors considered in determining audit price. Existing audit price literature (Eshleman and Guo, 2013) have indicated that there is a direct association between audit fee and financial risk. The reason for the positive association is that auditor tends to suffer litigation risk from a company with unhealthy financial condition compared to Health Company

Audit Switch
There are a lot of reasons why audit client engaged a new audit firm rather than the immediate one. Some of the intentions of switching are; reduction of audit fee, improving (injection of fresh idea by the new auditors) or compromising audit quality (through economic bonding) and compliance with regulation of maximum tenure of 10 years as stipulated by law. Based on the agency problem auditor are mostly switching auditors to reduce the agency cost. Archival literature on audit fee (Krauß, *et al.*, 2015) shows that there is a negative relationship between audit fee and audit switch.

3. Research Methods

A longitudinal research design was adopted for the study, covering the cross-sectional units of 14of the 16 listed deposit money banks in Nigeriafrom 2006 to 2017. We considered deposit moneybanks with available and accessible data over the period.The choice of the base year of 2006 was necessitated to accommodate the year where maximum audit tenure of ten yearswas promulgated by the Central Bank of Nigeria (CBN).The study used a secondary source of data collected from the annual financial report of the selected listed firms.

Specification of Model and Measurement of Variables
The study anchors onindustrial economies. The rationale is that audit service engagement is also a product,andthe forces of demand and supply determine the prices of commodities. The statutory audit supplyis highlyconcentrated, anddemand for the productexceeds the supply.Based on structural conduct performance, there is a tendency of the supplier to exploit the buyer in term of price. A busy accounting period creates a cluster demand.Also,timelinessdeepens theclusterdemand at a particular time. The functional relationship of audit price, busy accounting period and timeliness reporting is given as;

$$aud\ price = f\ (busy, report\ lag) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.1$$

We represented the audit price with $aud\ price$, busy accounting period is proxy with $busy$ and timeliness reporting as $report\ lag$. We expects to have a positive association audit price and both explanatory variable of the busy accounting period and timeliness reporting is evidence previous studies (Hay, Knechel, & Wong , 2006; Choi Kim, Liu, & Zang, 2010; Kraub, Pronobis & Zulch, 2015).

We controlled for the association of audit price andbusy by including audit switch. The audit switch will reduce the effect of cluster demand created by busy accounting period and timeliness on audit price.Audit switch is assumed to have a negative relationship with audit price; this is consistent with the study of (Kraub, Pronobis& Zulch, 2015;Fitrianyet al.2016;Sudaryono, 2017).The functional relationship between audit price, busy accounting period and timelinessis given as;

$$aud\ price = f\ (busy, report\ lag, aud\ switch) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.2$$

We also controlled for client size, client complexity, profitability,financial risk, auditor characteristics,age. The relationship of client size, client complexity, financial risk,auditors characteristic,ageis expected to be positively related to audit fee and profitability is assumed to be bi-directional. The functional representation of this is;

$aud\ price$
$= f\ (busy, report\ lag, aud\ switch, cl\ size, cl\ complexity, profitability, financial\ risk, aud\ char, age) \ldots \ldots 3.3$

The functionality relationship expressed in econometric form as

$$audpr_{it} = \beta_0 + \beta_1 busy_{it} + \beta_2 replag_{it} + \beta_3 aud\ switch + \beta_4 cs_{it} + \sum_5^6 \beta_n cc_{it} + \beta_7 prof_{it} + \sum_8^9 \beta_n fr_{it} + \beta_{10} for_{it} + \beta_{11} age_{it} + e_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.4$$

Where the $audpr$ is used to proxy audit fee. The primary variables of interest are Busy accounting period and timeliness reporting. Busy is used to proxy an accounting year end of 31st Decemberand timeliness (replag) represented by the deviation in days of the the date the auditor signs the reports and accounting year end. Both primary variables of interest are expected to have a positive association with audit price. The auditors switch (audswitch) is expected to mediate the association of audit fee and the two primary variables of interest. Auditswitch is expected to have a negative associatioin with the audit price.

Client size (cs) measured by the naturallogarithm of the totalasset is expected to have a positive association with audit price, this is consistent with the study of (Ilaboya *et al.* 2017; Fitriany *et al.* 2016). We measured client complexity (cc)withnumbers of business segment and employee. As client complexity increases, the audit hours required to carry out the audit task also increase. The client complexity is expected to have a positive influence on the audit price as evidence in audit fee literature (Fitriany *et al.* 2016). Client profitability (prof) measured by return on asset measures level of profitability, and it is expected that a firm with higher profit will have volumes of transactions which invariably increases the auditors time to complete the audit assurance. Firms with financial risk (fr) pose litigation risk to the auditors in an attempt to reduce this risk; more audit resources are consumed,and this increases audit fee.

The Big Four (for) usuallycharges more fee compare to the non-Big due to their reputation and international cover. The Big Four is positively related to audit price.

The association of audit price, busy accounting period and timeliness reporting is given as

$$audpr_{it} = \beta_0 + \beta_1 busy_{it} + \beta_2 replag_{it} + \beta_3 aud\ switch + \beta_4 lnsiz_{it} + \beta_5 lnemp_{it} + \beta_6 lnnseg_{it} + \beta_7 prof_{it} + +\beta_8 lev_{it} + \beta_9 losslag_{it} + \beta_{10} for_{it} + \beta_{11} age_{it} + e_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..3.3$$

Apriori Expectation

$$\beta_1, \beta_2, \beta_4, \beta_5, \beta_6 \beta_7, \beta_8, \beta_9 \beta_{10}\ \&\ \beta_{11} > 0$$
$$\beta_3 < 0$$

Audit Price, Busy, report lag, and the control variables,auditswitch client size, numbers of the employee, the natural logarithm of the number of the businesssegment return on total asset, leverage, previous year loss, the Big Four and Age in the model 3.3 were subjected to Alkaline information criteria to select best explanatory variables for the study. After performing theAlkaline information criteria, five out of the eleven explanatory variables were dropped, the Big Four, lagloss, a number of the business segment, return on asset, and age was lowered from the model. The model was later re-written as

$$audpr_{it} = \beta_0 + \beta_1 busy_{it} + \beta_2 replag_{it} + \beta_3 aud\ switch + \beta_4 lnsiz_{it} + \beta_5 lnemp_{it} + +\beta_6 lev_{it} + e_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..3.4$$

Apriori Expectation

$$\beta_1, \beta_2, \beta_4, \beta_5\ \&\ \beta_6 > 0$$
$$\beta_3 < 0$$

Table 1: Measurement of Variables

S/N	VARIABLES	DESCRIPTION /MEASUREMENT	SOURCE(S)
1	Audit price ($audpr$)	Natural log of audit fees	Zhang (2014); Ramadan Al Nawas and Al-Khaddash (2013); Wu et al. (2008)
2	$Busy$ ($Busy$)	a dichotomous variable that represents 1, if the year ends in December, and 0 otherwise	Krauß, *et al*. (2015); Mitra et al. (2009); Hay et al. (2006)
3	$Reportlag$ ($Reportlag$)	The time lag in days between fiscal year end and audit report date	Krauß, *et al*.(2015)
4	Auditswitch ($aud\ switch$)	Indicate variable of 1 if a new audit is engaged zero otherwise	
5	Size (ta)	Natural log of total assets	Ilaboya *et al.* (2017); Fitriany *et al.* (2016); Eshleman and Guo (2013);
6	Employee $lnemp_{it}$	Natural logarithm of the number of employees	
7	Number of segment (seg)	Natural log of the number of business segments	Fitriany *et al.* (2016); Choi et al. (2010); Choi et al. (2008); Hay et al. (2006); Simunic (1980)
8	Return on asset (ROA)	Return on assets (net income divided by total assets)	Eshleman and Guo (2013); Hay et al. (2006); Simunic and Stein (1996) Simunic (1980)
9	Change in leverage (Δlev)	leverage isdebt divided by total assets	Eshleman and Guo (2013); Hay et al. (2006); Simunic and Stein (1996); Pratt and Stice (1994); Simunic (1980)
10	$lagloss$	a dichotomous variable that represents 1, if previous year PAT less than 0, and 0 otherwise	Eshleman and Guo (2013); Simunic (1980)
11	Type of auditor ($BIG\ 4$)	1,if audited by Big 4, Zero otherwise 0	Ilaboya *et al.* (2017); Krauß,*et al*(2015); Palmrose (1986a); DeAngelo (1981b)
12	Age (age)	Natural logarithm of the years the bank has been in operation	Eshleman and Guo (2013); Hay et al. (2006); Simunic and Stein (1996); Simunic (1980)

Source Authors compilation (2019)

4. Results and Interpretation

Pre- estimation Diagnostic Test
In order not to have a spurious regression, necessary diagnostics test such as heteroskedasticity, multicollinearity, normality, specification and function form of the model, were conducted. Theheteroskedasticity problem was carried out using Breush-Pagan Test; the result showed that the model 3.4 does not suffer from heteroskedasticity problem (p> 0.05). Multicollinearity problem was diagnosed using Variance inflation factor (VIF) toverified if one explanatory variable is explaining another explanatory variable. Table 2 showed the variance factor coefficient of each explanatory variable natural logarithm of size showing a variance factor of 2.36, no of the employee also has a variance factor of 1.71, while the variance factor of busy, report lag, audit switch, and leverage were 1.37, 1.17, 1.06 and 1.18 respectively. The result of

the VIF for all explanatory variables is less than 5, indicating that there is no problem of multi-collinearity. The functionalof the model was also carried out the result showed that there was no functionalspecification error.

Table 2: Diagnostic Tests

Regression assumptions:	Test: We seek values
1) no heteroskedasticity problem	Breusch-Pagan hettest > 0.05 Chi2(1):0.014 p-value:0.906
2) no multicollinearity problem	Variance inflation factor < 5.00 lnsiz:2.36 noofemply: 1.71 busy: 1.37 lev: 1.18 replag: 1.17 audsw: 1.06
3) residuals are not normally distributed	Shapiro-Wilk W normality test > 0.01 z: 5.924 p-value : 0.000
4) specification problem	Linktest > 0.05 t: 2.154 p- value: 0.033
5) functional form problem	Test for appropriate functional form> 0.05 f(3,140):3.675 p-value:0.014
6) no influential observations	Cook's distance < 1.00 no distance is above the cut-off

Source: Authors computation (2019)

wherelnaudpr measures the natural logarithm of audit price. Replag measures timelines, busy represent client with year-end of 31st December, lnsiz is representing client size measured by logarithm of total asset. While audsw is a dichotomous variable indicate whether the client change it auditor. The firm complexity is represented by number of employee. While lev measures the firm financial risk

Correlation Analysis
The correlation matrix shows the information about the pair association of all the variables for the study and also the extent ofthe multicollinearity problem. The result in Table 4.3showsthe association of the independent variables and auditprice. Every independent variable is statistically significantexcept for audit switch. .Also, the result also showed other relevant relationship among the explanatory variables. For instance, size is negative but significantly associated with timeliness reporting; this result indicates that larger firms have a sound internal control which will enable the auditor to place reliance on the control put in place and complete the audit assignment in due time. The correlation analysis also support the fact that there is no multicollinearity problem as the highest positive correlation value is 0.6076 the association of natural logarithm of size and employee and the strongest negative correlation value association is client size and timeliness with a correlation value -0.285 both lower than the threshold of 0.7

Table 3: Correlation Analysis

|	lnaudpri	replag	busy	lnsiz	audsw	noofemply	lev	Vif
lnaudpri	1							
	0.000							
replag	-0.178*	1						1.17
	0.0287	0.000						
busy	0.5686*	-0.189*	1					1.37
	0.000	0.0189	0.000					
lnsiz	0.7982*	-0.285*	0.4108*	1				2.36
	0.000	0.0004	0.000	0.000				
audsw	0.0262	0.029	0.2157*	0.1079	1			1.06
	0.75	0.7209	0.0072	0.1887	0.000			
Noofemply	0.2891*	-0.0055	0.1293	0.6076*	0.0124	1		1.71
	0.0003	0.9457	0.1101	0.000	0.879	0.000		
lev	0.2438*	0.0896	-0.1607*	0.2353*	0.0818	0.1968*	1	1.18
	0.0026	0.2693	0.0465	0.0038	0.3134	0.0144	0.000	

Source: Authors computation (2019)
*The red colour shows the pairwise association and white colour show the probability level. The * show the variables that are statistically significant at (P< 0.05) where lnaudprmesaasures the natural logarithm of audit price. Replag measures timelines, busy represent client with year-end of 31st December. lnsiz is representing client size measured by logarithm of total asset. While audsw is a dichotomous variable indicate whether the client change it auditor. The firm complexity is represented by number of employees, while lev measures the firm financial risk.*

Descriptive Statistics

The study covered the time period of 2006-2016 and the sample size of 15 listed deposit money banks in Nigeria resulting into a total of 154 observations. The table 4.4 showed that the average days of reporting by deposit money bank auditors in Nigeria is 94 days which is higher than the 90 days stipulated by Nigerian stock exchange commission (NSE). The result indicated that not all listed banks comply with the time limit for reporting, but at least 50 percent of the total deposit money bank complies with the time limit of 90 days by reporting in 83.5 days. In fact, the timeliness reporting is highly volatile with a standard deviation of 67.15 days, the maximum value of the timeliness is 500 days, evidenced that some banks have a poor internal control that cannot be rely upon and this might make the auditor to result to substantive test by engaging more audit resources and invariably increase the auditor's remuneration.

The result from the Table 4.4 depicted that 72.72% of the listed bank have a closing year end of 31st December, this is attributable to the Central Bank of Nigeria regulation enforcing 31st December as the closing year banks operating in Nigeria. The statistics is similar to work of (Uroghide & Izedonmi, 2015), it also showed that 50 percentile of the total observations complied with the seasonal audit year end over the period of study. The result showed that the demand of statutory audit is highly clustered, and the supply limited in short-run over stretching the auditor resources and the increased marginal cost of the audit engagement leading to likelihood of exploitation of audit price and quality

Also, the Table 4.4 showed that approximately 15 percent of the listed banks changed their auditors during the period of focus. Translating the relative term of 15 percent for 154 observations to absolute term gave a total audit switch of 23 times over the period. The mandatory audit rotation enacted by the CBN in 2006, setting maximum audit tenure of 10 years give a mandatory change of 15 times minimum. The excess of eight times over the except 15 times shows that audit client does not only switch auditors in relation to mandatory compliance but also in response to other variables like higher audit price and /or lower audit quality.

The financial risk of the banking sector is high and the client capital structure is highly geared with a mean value of 0.7891 indicating that debt constitutes 78.79 percent of the capital structure constitute debt finance. There is likelihood that the auditors spend more resources to reduce litigation risk and hence, charges higher audit fee.

Table 4: Descriptive Statistics

Variable	N	mean	p50	sd	min	max	skewness	kurtosis
lnaudpr	150	11.533	11.512	0.7283	9.5468	13.09396	-0.219790	2.86978
replag	154	94.3636	83.500	67.1552	0.000	500	3.247814	18.5135
busy	154	0.72727	1.000	0.44681	0.000	1.00	-1.020621	2.04166
lnsiz	150	20.3923	20.534	0.9317	18.4847	22.17809	-0.262773	2.25539
audsw	154	0.14935	0.00	0.3575	0.000	1.00	1.967543	4.871225
noofemply	154	3751.27	2808.5	2578.044	0.000	11791	1.018884	3.19796
lev	154	0.78591	0.85037	0.25137	-0.05595	1.402127	-2.32785	8.38818

Source: Authors computation (2019)

wherelnaudpr measures the natural logarithm of audit price. Replag measures timelines, busy represent client with year-end of 31stDecember .lnsiz is representing client size measured by logarithm of total asset. While audsw is a dichotomous variable indicate whether the client change it auditor. The firm complexity is represented by number of employee, while lev measures the firm financial risk

Interpretation and Discussion of Finding

The Generalized Linear Method (GLM) was used to estimate model 3.4. The estimated result showed that both seasonal Audit and Timeliness reporting, positively and significantly affect audit price. The four control variables of client size (lnsiz), audit switch (audswi), client complexity (number of employee), and financial risk (leverage) were all statistically significant. The busy accounting period with a statistic of (coeff, Z, P-V), (0.0457, 8.58, 0.00) showed that seasonal Audit is positively significant in the determination of Audit price. The result indicated that the cluster demand created exceeds the supply of statutory Audit. By implication, the Auditor must stretch his limited resources by working overtime, or employ adhoc audit staff during the Audit season. Also, during the seasonal Audit period, the marginal cost of Audit service is very high, since the statutory Audit has inelastic demand and supply. The majority of the cost incurred during the audit is mostly borne by the client.

Base on the market structure, the client can be exploited in term of price. The result is consistent with the study of (Hay et al., 2006; Hay, 2013; Ng, Tronnes, & Wong, 2018). But contradicted the submission of (Urhoghide & Izedonmi, 2015). The timeliness report is positive and significantly related with price with a statistic of (0.0001, 2.96, 0,003). The result indicated that when more time is expected to be spent, this indicates possibility of weaker internal control, higher audit work load. The seasonality Audit creates a cluster demand with limited audit resources, the time and days to complete the task will increase. From the table 4.5 shows that audit clients respond to higher audit price by giving subsequent audit assurance to another audit firm that will charge a lower audit fee i.e. audit switch is a tool used by audit client to counteract the effect of audit fee. The results also conform with existing literature on the relationship of client size and audit fee. From the table, it can be seen that there exists a positive relationship between client size and audit firm. The table 5 also shows that audit firm charges higher to firms that have higher financial risk.

Table 5

lnaudpri

replag |	<0.0001>	
	(2.9600)	
	0.0030***	
busy	<0.0457>	
	(8.5800)	
	0.000***	
lnsiz	< 0.058674>	
	(14.6700)	
	0.0000***	
audsw	< -0.0227>	
	(-2.09)	
	0.0360***	
noofemply	<-7.12E-06>	
	(-5.8800)	
	0.0000***	
lev	<0.0330>	
	(2.6700)	
	0.0080***	
_cons	<1.2077>	
	(16.25)	
	0.0000***	

Source: Authors computation (2019)
The<> shows the coefficient, () indicates the z statistics, the italics number is p-value, *** show that the variables that are statistically significant at P<0.01, ** (P< 0.05),*(P< 0.10). wherelnaudpr measures the natural logarithm of audit price. Replag measures timelines, busy represent client with year-end of 31st December. lnsiz is representing client size measured by logarithm of total asset. While audsw is a dichotomous variable and indicate whether the client change it auditor. The firm complexity is represented by number of employees, while lev measures the firm financial risk.

5. Conclusion

Our study investigated the relationship of Busy Accounting Period, Report Lag on Audit Price. The study used 15 of 16 listed deposit money bank on Nigeria over 2006 to 2007. The study concluded that the common year ended Act stipulated by CBN in 2009 created a highly concentrated clustered demand for statutory audit leading to audit fee premium. Also, the report lag is positively related to Audit fee. Our study has contributed to knowledge by investigating two variables; the influence of busy accounting and report lag on audit price which are rarely considered as a drive of audit fee.

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Paper 36

University of KwaZulu-Natal students' perceptions of Woolworths green branding initiatives

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Abstract: Green branding is a relatively new concept catching on worldwide. Students in this day and age have sophisticated needs and lifestyles. Students now are adopting a more health conscious lifestyle. This impacts on their buying behavior as more young people become more green brand conscious. The main aim of the study was to ascertain the extent to which university students at the University of KwaZulu-Natal are open to the notion of green branding. This study chose to focus on UKZN students to determine their awareness, attitudes and perceptions towards green branding. The study focused on students' perceptions towards green branding towards Woolworths products. When making food purchases in the past it has not always been a consideration of customers to be concerned with the effect that their consumption has on the environment. This is slowly changing as customers are becoming more health and environmentally conscious. This study was quantitative in nature and data was collected using a survey. A structured questionnaire was used to collect data from student respondents' at UKZN. Probability sampling was used in the sampling. The researcher's employed simple random sample. The survey was conducted on a sample of 383 registered students at the five campuses of UKZN. The results indicated that students had varying views towards green branding. The study also made a contribution to the marketing fraternity, particularly those who are specialising in green marketing in the food industry such as Woolworths. This study is relevant to marketers, as they need answers to assess the extent to which young people consider aspects like green branding, brand loyalty and being health conscious when making purchase decisions.

Key Words: *Ecofriendly, Green branding, Green marketing, Heath conscious, University students*

1. Introduction

The study to be undertaken aimed to investigate the perceptions of university students towards the concept of green branding and green marketing by a leading brand such as Woolworths. In the current information age that our university students' reside in, information on products are readily available to the modern consumer. The information age has created a shift in the way consumers behave in terms of their purchasing decisions. The tendency for young people to be more involved with their bodies, being health conscious and choosing certain types of organic and green food has led to students' buying behaviour shift into green consumerism. Marketers' during this contemporary era have picked up on this and had to respond to keep abreast of these changes in the buying patterns of consumers.

Hypothesis
There is a statistically significant difference in UKZN students' awareness, perception and attitudes towards green branding.

2. Literature Review

In the literature review various theorists' views on the subject of green marketing with specific reference to green branding and consumer buying behavior is put forward and discussed. The discussion begins with unpacking the concept of green branding. Green branding and sustainability are pertinent issues faced by marketing mangers world-wide. Since the business landscape has scarce resources, as human beings, our tasks are to find lucrative new ways in order to take care of these scarce resources and the natural environment. The challenge for marketers currently is being able to position their products/ services in such

a way that they emphasize the benefits of green and sustainable products to the end consumer. According to Shabani, *et al.* (2013) the first definition of green marketing was presented in 1979 by Henion, who assumed that green marketing involved marketing programs and activities that focused on the environment-friendly sectors or the same green market approach. Insch (2011) argues that a green brand focuses on environmental values and this constitutes the brand's essence. Cronin, Smith, Gleim, Ramirez, & Martinez (2011) posit that research indicates that 75% of consumers routinely report that they are green or in fact prefer environmentally friendly products.

Another issue of interest is the concept of green marketing. A common misconception existing amongst marketers is that majority of people believe advertising or promoting environmentally friendly products refers to green marketing. Consumers can often associate terms such as ozone friendly, CFC free, refillable, recyclable, phosphate free with green marketing. These are indeed some of the green marketing elements that one may encounter; however, green marketing as whole cannot be defined in a manner as simple as that. Brownlie & Tadajewski (2008) expressed an interesting view and said that: "Both ecological marketing and green marketing start from the necessity of combining profit making for private companies with sustainable environmental quality for society in general. Ecological marketing focuses on the acknowledgment of an impending ecological crisis and the willingness and ability of marketers to assume the responsibility for avoiding this doom".

Marketing research has shown that the key determinants of how a firm operates are dependent on its stakeholders. The key factors include environmental strategy as well as stakeholders' analysis. A similar study which sought about evaluating green marketing strategies by Cronin, *et al.* (2011) indicated that going green has begun to take centre stage in several boardrooms around the world. This is because management has been persuaded to come on board to green marketing as it yields very lucrative profits. The study also highlighted strategies which were environmentally friendly as well as the pitfalls which resulted from non-environmentally friendly strategies. Estes (2009) argues that the "Green Rush" is found everywhere which builds upon the fact that all types of organizations need to embrace and take sustainability more seriously. This is clearly not a trend for a selected few customers who fit in a certain mould. As consumers use their knowledge of how global warming is beginning to affect the world and that it is becoming a real phenomenon along with the increase in energy prices, we can see how important and well-received green marketing communications are. The green industry itself both in the United States as well as worldwide is growing continuously. Estimates have the marketplace reaching sums of $300 to $500 billion annually.

Within the South African context, for organizations like Woolworths, the marketer has to be aware of how Woolworths green branding will translate into the unique local market. When a nation's population is faced with issues such as high unemployment and inequality, we need to determine if it is indeed the most important issue for our consumers to see green marketing and sustainability as an issue. They also need to determine if such contemporary marketing issues are something that will make customers come back repeatedly. Levinson & Horowitz (2010) further build upon this point with their assertion that the issue of trust goes straight into the organization's bottom line, citing the presence of three-fifths of organizations on *Fortune* magazine's list of 100 Best Companies to Work for holding the trust of their stakeholders. This in turn brings about the argument that customers feel good about supporting such organizations and are willing to pay higher prices to support those that are both socially and environmentally responsible in their business practises.

Woolworths have also taken to this mantra with their production of food and sourcing of products being more organic and their packaging of products being more environmentally friendly ("Woolworths Holdings Limited: Good Business Journey Report": 2015). Baird (2013) observes that there is an urgent need for effective communication strategies that can educate and inspire greater acceptance and understanding of just what it means to be "sustainable" and why this is the most important trend of the next century for a business and its' social stability. Baird (2013) further highlights how the gap between intention and action needs to be closed. There is an obligation for local South African advertising agencies to adapt, no matter how late it may be, to integrating marketing and sustainability into one strategy. Organic foods and organic farming have been and continue to be one of the fundamental issues in terms of global sustainability techniques. It is

important to draw the consumers' attention to this, as it has been found that it may be lost upon a regular shopper. This needs to be done especially in major supermarkets where these organic products may become lost among the clutter. Roitner-Schobesberger (2006) argues that it is often the specialized and niche grocery shops that have a better chance of selling green and organic products as consumers often view these specialized green and organic stores as being more authentic.

A persons' values and beliefs can be a major influence on consumer purchasing behaviour. The way a consumer sees himself and the world is important. Perception can shape action, especially when taken into account consuming and purchasing specific products. Maheshwari (2014) posits that a consumers' values can be depicted as being an enduring belief that influences their behaviour. If a consumers' beliefs and values include them having a deep love and respect for the environment and its' sustainability, then this belief can translate into actions of green purchasing behaviour. Yusuf and Fatima (2015) add that a green consumer is one "Who is mindful of environment related issues and obligations, and is supportive of environmental causes to the extent of switching allegiance from one product or supplier to another even if it entails higher cost". Mahmood, Siddiqui & Tahir (2014) go on to emphasize that there is a strong suggestion for companies to continue to promote green branding, eco-labelling, and green packaging strategies in order to breed a more 'pro-green' society who have shifted their way of thinking and have bought into it. The green consumer is often seen as the one who is willing to pay more for green products to preserve the environment. This is brought about by the concept of "Green Perceived Value", where the consumer is able to enjoy a product that meets and surpasses their expectations which encompass the benefits, features and the way in which the product performs. Murin, *et al.* (2015) argue that environmental or green marketing's main objective is to promote and popularize science knowledge in a way that would result in responsible behaviour and result in a shift towards a 'greener' way of purchasing.

In the discussion below the research methodology underpinning the study will be discussed.

3. Research Methodology

In this section a brief methodology employed in the study would be outlined and discussed. The sample method, population, survey, questionnaire, validity and reliability, ethical considerations and limitations pertaining to the study will be highlighted.

Sample Method
Probability sampling was applied in this study. Simple random sampling method was used. Thompson (2012) asserts that when using simple random sampling the researcher is using a sampling design, in which n distinct units are selected from the N units in the population in such a way that every possible combination of n units is equally likely to be the sample selected. Furthermore, Saunders, Lewis and Thornhill (2012) maintain that a sampling frame for any probability sample should consist of a complete list of all the cases of the population from which a sample would be drawn.

Population/Sample
Lavrakas (2008) defines a target population of a survey as the entire set of units for which the survey data would be used to make inferences to. In this study, the targeted population was all registered University of KwaZulu-Natal (UKZN) students. The study is based on all five campuses that encompass UKZN which include Edgewood, Howard, Pietermaritzburg, Westville and the Nelson R Mandela School of Medicine. The population was around 40000 students at the 5 campuses. The sample size for the study was 383 registered UKZN students. This sample was drawn using Krejcie and Morgan (1970) statistics tables.

Survey
The quantitative approach was utilised in this study. A student survey was conducted at UKZN's five campuses. Denscombe (2010) outline potential benefits associated with the survey method. They are as follows:
- A focus on empirical data, this means obtaining data from the real-world or 'straight from the horses' mouth'.

- Ability to collect both quantitative and qualitative data, meaning large volumes of data that can be obtained through the self-completion questionnaires, which usually generate large amounts of quantitative data that can be analysed statistically.
- A wide and inclusive coverage. In large-scale questionnaire surveys generalizations can be made out of a wider population, while in small-scale interview surveys sampling techniques used can allow the researcher to 'build up a picture based on data which includes a full range of relevant items or people.
- Cost and time. Surveys can offer efficiently and relatively inexpensive means of collecting data. Results can also be obtained over a relatively short period of time and time could be the only significant cost involved.

Data Collection Instrument
The data collection instrument used in the study was a closed-ended questionnaire. The questionnaire was used to assess students' perceptions towards green branding in Woolworths. Sekaran and Bougie (2009) posit that questionnaires are deemed an efficient way to collect data, provided the researcher is fully aware of the required elements and how to measure variables of interest. The Five -Point LIKERT scale was used to design the questionnaire which rated from 1 – strongly disagree, to 5- strongly agree. According to Hair et al. (2008) the LIKERT scale is highly beneficial for the research design utilised in self-administered surveys, personal interviews or online surveys.

Validity & Reliability
A pilot study on 5 students was conducted to ensure validity. The reliability in the study was measured using Chronbach Alpha. Cooper & Schindler (2010) indicated that Cronbach's alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability. The study had an excellent Chronbach alpha score of 91% indicating very reliable data.

Ethical considerations
The foremost concern of the researcher was to protect the participants from any exposure to confidential information that may, in the process, harm their integrity or self-esteem. An ethical clearance was received and granted from the office of the Registrar at UKZN for this study. Furthermore, the questionnaire that was handed to the students contained a covering letter stating the ethical integrity and the purpose of the study. Additionally, the ethical clearance proposal that was administered by UKZN highlighted that the questionnaires collected from the study would be kept at the university premises for a period of five years. All forms of ethical approval were disclosed to the participants and they were free to participate or withdraw from the study at any time.

Limitations of the study
The study was only conducted at the University of KwaZulu-Natal. If other universities within South Africa were included a wider sample and population would have gathered results that could be generalised to our country.

4. Discussion of Results

In the study data was statistically analyzed. Both descriptive and inferential statistics would be discussed in detail.

Descriptive statistics on Study Respondents
Majority of the study respondents (78%) were students who were 25 years or younger. There was (53%) male and (47%) female respondents. More than (81%) of the student respondents were single. About two-thirds (66%) of the respondents were undergraduate students and the remaining (34%) were postgraduates. In Figure 1 below, a diagrammatic representation and discussion regarding students' perceptions on green branding awareness will be presented.

Figure 1: Summary of statements regarding awareness of green branding (Grootboom, 2018)
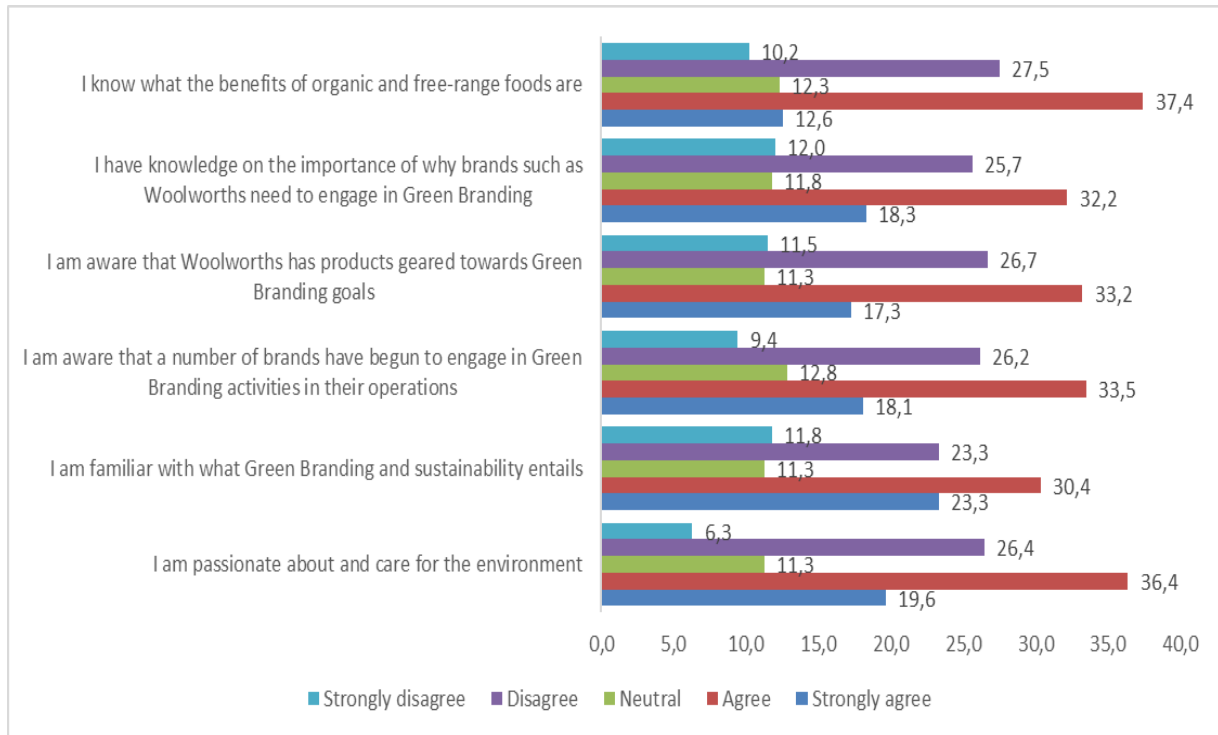
There was (47.6%) of UKZN students' who knew what the benefits of organic and free-range foods were. The results further indicated that (50.5%) of the students had knowledge of the importance of the Woolworths brand that engaged in green marketing. The results highlighted that (50.5%) of student respondents were aware that Woolworths had products geared towards green branding goals. The study also indicated that (51.6%) of students' were aware of brands being engaged in green branding activities in their operations. The study results also indicated that (53.7%) of students' were familiar with green branding and sustainability. Lastly, (56%) of UKZN students' were passionate about and cared for the environment. Dahm, Samonte & Shows (2010) in their study which was conducted on American college students concluded similar results to the researchers' study. They indicated that American college students had positive attitudes towards organic foods.

Inferential Statistics

Table 1: Spearman correlation test output for Awareness, Perception, and attitudes regarding green branding

			Awareness	Perception	Attitude
Spearman's rho	Awareness	Correlation Coefficient	1.000	.788**	.545**
		Sig. (2-tailed)	.	.000	.000
		N	382	382	382
	Perception	Correlation Coefficient	.788**	1.000	.620**
		Sig. (2-tailed)	.000	.	.000
		N	382	383	383
	Attitude	Correlation Coefficient	.545**	.620**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	382	383	383

(Grootboom: 2018)

The results indicated that there were statistically significant differences towards UKZN student awareness, perception and attitudes towards green branding ($p<0.05$). The hypothesis is accepted. The new millennials are the green consumers who care about green consumerism and making a difference in their purchasing decisions. Dagher & Itani (2014) argue that consumers are conscious of the fact that their individual consumption behaviour impacts on the environment. Thus, consumers are increasingly engaging in environmentally-friendly behaviour and are supporting businesses that implement green strategies. The new millennials are young people engaging in green consumer behaviour because they are concerned about their bodies and what goes into it. They also are concerned about the quality of air and the environment. Ansar (2013) indicates that the positive attitude of consumers towards the environment is evident in their shopping habits, such as their concern regarding CFC-free products and product recycling. Sharma (2015) adds that socio-demographic characteristics such as age and education level play an important role in influencing the consumer's intention to go green. Wang (2014) cites previous research studies that have identified women, young adults and individuals with relatively high education and income levels as the most likely to engage in green consumption behaviour.

Implications on Management

The young health conscious consumer is a very viable market segment. Promoting products that are associated with green branding initiatives are very lucrative and can yield positive returns. Woolworths in order to maintain its competitive advantage has capitalized on the green segment by providing fresh organic foods that are wholesome. Woolworths packing is being steered towards being eco-friendly. The good news is that retail outlets such as Woolworths have recognized that the world is changing. In order to remain competitive, Woolworths has been actively keeping abreast of the changing customers' needs and have responded by providing products accordingly to maintain the green market segment. Woolworths have developed an excellent line of foods, specially prepared and packaged for the green market segment. The idea is that Woolworths' management has to continue to value its promise to its green customers by ensuring fresh organic produce is available to its customers at affordable prices. Woolworths' food is synonymous with quality and this trust must be continually nurtured by management.

5. Conclusion and Recommendations

Recommendations

Woolworths is an organization, which have clearly aligned their business strategies towards green sustainability and environmental consciousness. The company has geared for this change, and have outlined this in their Good Business Journey. Woolworths' management has invested a lot of time and energy in sourcing the best suppliers for their organic food range and green brands. Quality is a very important construct to Woolworths and finding suppliers that are reliant and affordable is very important. This study has further illustrated that Woolworths is respected for their green branding initiatives. The task going forward is for Woolworth's promotions to continue to educate the youth and other consumers on how much effort the company is engaged in to ensure a green future. Woolworths marketing campaigns must continue to aggressive advertise its green brands. This would assist in keeping the green consumers engaged with their green product range.

Concluding Remarks

Students' are major consumers of food. In recent years students' have become very health conscious. Taking this into account, Woolworths has to make sure that the students' needs are met, by providing quality green brands at affordable prices. Encouraging green consumerism should be a strategic competitive advantage Woolworths is passionate about. Marketing its green brands is pivotal to the marketing success and continued sustainability of Woolworths. The effectiveness of green marketing and green branding for brands or organizations such as Woolworths in South Africa lies in the marketing communications ability to firstly make the consumer aware of the issues surrounding scarce resources and the fragile environment within which we live. Once these risks are known they can impact current buying behaviour which could have a lasting effect on future generations. There must be a paradigm shift towards green branding and green consumerism, it is the only way to sustain the planet and its' vast inhabitants.

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Paper 37

An assessment of the business process review: A case study of the finance division at the university of Kwazulu-Natal

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Abstract: The University of KwaZulu-Natal Finance division underwent a restructuring process in 2014 that saw the number of staff in the Finance division reduced from 120 to 75 staff. University management argued that the process aimed to downsize staff from the support sector in order to re-allocate funds to the academic sector. The re-structuring had not been an easy process for staff at the university as it affected their morale and productivity. The purpose of this study was to look at the strategies that can be used to effectively restructure the organization without effecting the motivation and morale of the staff. Managers and change consultants were needed to implement the correct strategy that fit the organization. This way staff satisfaction and staff morale would be improved, resulting in maintaining high levels of productivity within the university. The research was based on the quantitative approach. A questionnaire was designed with close-ended questions and sent to 63 finance staff at five of the university's campuses. According to the findings, the respondents felt that management did not follow crucial steps in the restructuring process. The results also revealed that more the 50% of staff were demotivated and displayed a very low morale. Staff also felt that management ignored their grievances regarding the restructuring process. The study recommended that the University of KwaZulu-Natal management find ways of motivating staff and improving their moral. It was also recommended that management at the university address staff concerns about the restructuring in a productive, transparent and amicable manner.

Keys Words: *Business process review; Finance division, Staff morale, University*

1. Introduction

The reason behind the reconstitution and metamorphosis of universities in South Africa was to transform the landscape of higher education after the new democratic era came into being. The University of KwaZulu-Natal (UKZN) was born in January 2004, from the merger of the University of Durban Westville which was historically an Indian university and the University of Natal which was an historical White university. In the year 2014, the 3rd phase of change was carried out where; the university relooked at its Finance and Human Resource Division structure. This was called "The Business Process Review". The aim of this process was to downsize staff from the support sector and re-allocate funds to the academic sector. The purpose of this study was to assess strategies that could be used to effectively restructure the organisation without effecting the motivation and morale of the staff.

2. Literature Review

In this section, the key themes of corporate restructuring, the impact of restructuring on employee wellbeing, motivating employees to change, staff commitment and support for change and crucial factors that undermine support for change would be highlighted and discussed.

Corporate Restructuring

In the early 1980s, corporate restructuring swept through the global landscape changing the corporate environment. Corporate restructuring is to this day, a prevailing factor on the business landscape that raises very contentious debates. According to Godbole (2013) organisations restructure with the belief that they are more innovative than their competitors. Most of the restructuring processes implemented were under the

belief that corporate financial performance would increase, however, the by-product of this process were added strains on the organisation's employees, taxpayers, and government. According to McCalman, Paton & Siebert (2016) change will never dissolute or fade due to the accelerated phase of technology, civilisation and innovative thought. Cawsey, Deszca & Ingols (2016) advises that prior to the implementation of the corporate restructuring, staff should have been advised of the risks and opportunities that the change would bring, so that excitement and discussion would be ignited within the organisation to ensure a successful change initiative.

According Depamphillis (2018), corporate restructuring can take form in the following types namely:
- Financial restructuring: this refers to changes to the organisations' capital structure, which involves shares or increase in debt to prevent a take-over.
- Operational restructuring: refers to changes to the organisation's asset structure.
  According to Cameron & Mike (2015) due to restructuring occurring so often, managers need to be aware of the process of restructuring. They should be alerted to what could go wrong and provided an example of a good restructuring process so that they can draw reference to it. Restructuring is a process that should be chosen as a last resort as it does not always address the problem it initially set out to resolve. Hughes (2011) argues that among the change initiatives undertaken there was 70% of these initiatives that have failed. This is due to a lack of a proper framework to implement change and to manage change by leaders.

The Impact of Restructuring on Employee Wellbeing
Wellness is a process that is vigorous and allows individuals and groups to be more alert to the responsibilities and choices that affect their life and take a conscious choice or decision to live a life of wellness and quality. The employee's wellbeing is an essential part of the organisation. Since restructuring brings with it uncertainty, change, stress, dissatisfaction and confusion, maintaining employee wellbeing is essential during the restructuring process. According to Cooper (2012) the effects of stress on staff is often reflected in staff's ill health. Quigg (2011) argued that employees that have survived a restructuring process are often demotivated. They are not committed to the organization and are insecure due to the lack of career growth. The restructuring process forms a very dominant role in the life of employees both in the private and public sector. Change and restructuring forms an integral part of the development and sustainability of an organisation, thus making it an essential process within the organisation. Although restructuring can be viewed by management and shareholders as being an essential tool for the company's future sustainability it can have a negative effect on the well-being of the workforce.

Productivity is essential to any organization. According to Halkias, Santora, Harkiolakis & Thurman (2016) productivity can be linked to an individual's psychological state and their feelings, which would determine how productive they are. Staff that are happy and psychologically stable are more productive within the company. Hayes (2014) posits that employee engagement and the company climate has a direct impact on productivity. A happy organisational climate fosters a productive workforce. Studies undertaken by Cooper et al. (2012) suggest that restructuring that resulted in downsizing and job insecurity affected an employee's occupational health and safety. Job insecurity due to downsizing within the organisation can impact the occupational health and safety of the employee. The employee's mental health is also impacted on, in the short-term as a result of restructuring and downsizing. Staff is emotionally affected after the restructuring process. Kieselbach & Triomphe (2010) indicated that after a restructuring process staff are often paralyzed by fear of losing their job and are therefore not flexible, innovative or committed to their tasks resulting in a decrease in the competiveness of the organization and a reduction in customer satisfaction.

According to Cummings and Worley (2013) downsizing the organization can result in a decrease in career opportunities for employees. Every employee has a psychological contract with the organization they are employed at and one component of this contract is to have career enhancement. Restructuring breaks this contract, which results in an unhappy employee. According to Vakola & Petrou (2018) they indicated that in their study, staff felt that their career opportunity had worsened resulting in staff exhaustion and decreases in productivity. This resulted in staff being mentally and physical exhausted due to the restructuring process.

Employees that remain after restructuring are referred to as survivors of restructuring. According to Stanislav and Thornton (2017) employees who remain after restructuring, experience a lack of motivation, have feelings of insecurity and have no commitment to the organisation, due to the loss of a traditional career as a result of the restructuring. According to Waddel, *et al.* (2017) transformation of an organization results in more intensive work demands, increase in accountability and the breaking of the psychological contract between the employer and employee. Employee's perception of restructuring and change is an explaining variable. An example of this is the personality and other personal characteristics would affect the employee's perceptions. Rationalization can reduce the adverse effects on employee's health and safety. The researchers' are of the opinion that employees form the heart of any organization, their safety and wellbeing should not be taken lightly by management.

Motivating Employees to Change
An organisation is like an open system which always wants to be in a state of balance provided all business activities, processes and structures are in order. One of the company's crucial components is their staff complement. When staff are thrown off balance by change there is added pressure placed on the organisation to bring back the state of balance. The realignment process can be achieved by aligning the other components to the ones that have just been changed. The staff is human and human beings resist change. Managers plays an essential role in supporting the staff through their change and motivating them to support change. Managers can go about motivating staff by emphasising the benefits change could bring to their lives. Stressing on the positive impact that change could have on the organisation, should be managers key focus.

Factors That Undermine Support for Change
The following factors undermine support for change within an organisation. They are as follows:

Low Trust
According to Hayes (2014) the misunderstanding employees have towards change cause them to resist change initiatives. These misconceptions cause employees to perceive change in a negative manner that bears them no benefit. This usually happens when there is no trust between the change manager and the employees, which often results in resistance to change. Managers should anticipate and plan for resistance to change. There has to be communication to the staff every step of the change process through the change managers. No matter how good and beneficial the change process will be to employees, if communication is not present and ongoing, then there will be no successful change initiative implemented.

Low Tolerance for Change
Employees resist change when they feel that they cannot develop the skill that is required to run the new changed process. Some staff may understand why change is needed and how it can improve their work-life but they resist change because they cannot emotionally handle the change. Employees can go into a state of denial. This creates reluctance in the employee to let go if they have the perception that they have lost in the change process.

Different Assessment
Employees assess the situation differently in comparison to those that are involved in the change process resulting in them seeing change as less beneficial for them and their constituency. Managers often assume that employees have the same information as they do, which is often not the case, resulting in resistance to change. According to Senior and Swales (2010) communication is the key to resisting change. Change managers need to also consider external stakeholders views.

Parochial Self-Interest
The impact that change has on employees' could include ways of working, job opportunities, career perspectives and job satisfaction. These factors can affect the employees' power, status and prestige. Change initiatives that threaten power and status results in one of the most influential resistance to change. In mergers the biggest fear that management and employees have is losing decision-making power.
In the discussion that follows the research methodology employed in the study would be unpacked and discussed.

3. Research Methodology

A quantitative study was carried out. The researchers in the study employed simple random sampling. A survey was conducted on a sample of 63 staff within the Finance department at the University of KwaZulu-Natal's five campuses namely, Howard, Westville, Pietermaritzburg, Nelson Mandela Medical School and Edgewood College, using a self-administered questionnaire. The questionnaire design had important implications on the study and the researchers opted to use a Five Point LIKERT Scale in designing the questionnaire. The study adhered to the specific ethical guidelines. The information provided by the respondent would be treated in strict confidentially. The primary ethical responsibility of the researchers was to guard the privacy of the study respondents. Peers from the University of KwaZulu-Natal who were experts in research methodology, senior academics, and a professional statistician reviewed the questionnaire. Based on their feedback, a few questions were re-phased. In this respect, the design of the questionnaire enjoyed high content validity. A pilot study was conducted to ensure that the instrument measured what it intended to measure. To test reliability in the study, the researchers' used Chronbach Alpha. The Cronbach's Alpha score for the overall staff perceptions was 96% representing an excellent significant level of internal reliability of the measuring instrument. The response rate for collection of completed questionnaires was 85.7%, which was excellent, as the questionnaires were administered via e-mail.

4. Discussion of Results

In this section, the descriptive and inferential statistics are highlighted and discussed.

**Descriptive Statistics**

Figure 1: The restructuring process has benefited all employees within the Finance Department
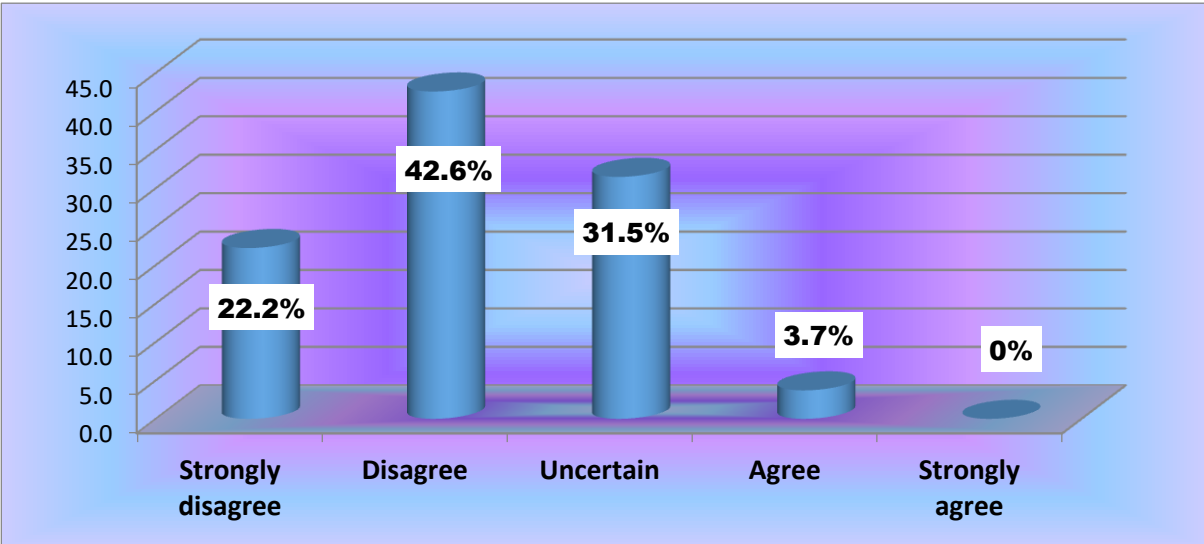
Thungavelu (2018)

Figure 1 indicates that the majority of the respondents (64.8%) believed that the restructuring process did not benefit all employees within the Finance department. A further 31.5% of the respondents were uncertain about organizational restructuring. The remaining minority of staff (3.7%) agreed that the staff within the Finance dept. benefited from the restructuring process. Quigg (2011) argues that employees that have survived restructuring are often demotivated, and not committed to the organization and are insecure due to the lack of career growth.

Figure 2: Staff is more motivated after the restructuring process to come to work each day
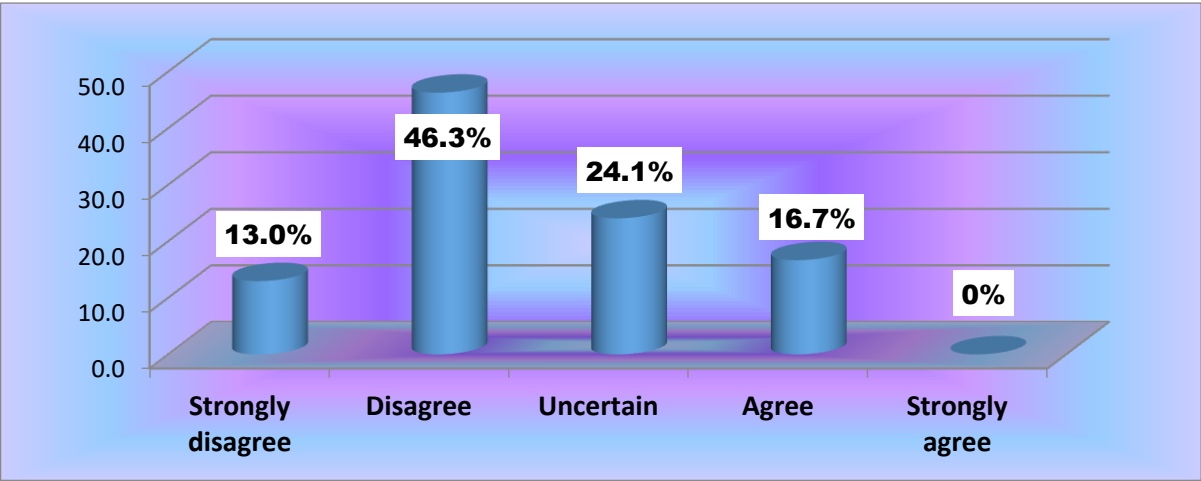
Thungavelu (2018)

Figure 2 indicated that the majority of the respondents (59.3%) believed that they were not motivated after the restructuring process and did not look forward to coming to work each day. 24.1% remained uncertain and 16.7% of the respondents indicated their agreement in being motivated to coming to work after the organizational restructuring took place. According to Oridge (2012) during the restructuring phase individuals came to the realization that bargaining would not work. This resulted in depression starting to develop in staff. Individuals became aware of the potential losses that resulted from the change and the reality of leaving it behind. The result of this stage is sadness, depression and low energy, leading to demotivation, increase in illness and absenteeism. This resulted in a steady decline in productivity.

Inferential statistics
In the inferential statistics Hypothesis 1 was presented and discussed.

Hypothesis 1: There is a statistically significant difference in the mean ranks of the dimensions between race and staff's morale and motivation after restructuring.

Table 1: Race and staff's morale and motivation after restructuring

Test Statistics[a,b]	
	QCB
Chi-Square	10.995
Df	3
Asymp. Sig.	.012
a. Kruskal Wallis Test (Thungavelu:2018)	

The Kruskal Wallis test presented in (Table 1), indicated that p < 0.012. Since p < 0.05 the tests indicated that there is a statistically significant difference in the dimensions between race and staff's morale and motivation after restructuring. The hypothesis is accepted. According to Stanislav and Thornton (2017) employees who remain after restructuring experience a lack of motivation, have feelings of insecurity and have no commitment to the organization due to the loss of a traditional career as a result of restructuring.

Change managers have to ensure that employees who are survivors of restructuring are lead into the right direction so that they prevent running into barriers that could result in them resisting the change process. Employees who resist change experience low morale and motivation. Kieselbach and Triomphe (2010) argues that managers should pay attention and be supportive of the feedback whether it is positive or negative from employees, especially during stressful times when restructuring is being implemented as this reduces resistance and drums support for restructuring.

5. Conclusion and Recommendations

Recommendations
Change is an acceptable part of work, resulting in positive outcomes in the long-term. However, the down side of change is that it can also create a lot of tension and insecurity in staff, which leads to staff being distressed. The distress that staff experience can lead to them having physical and mental health issues. An increase in the amount of work, ambiguities, new tasks, new technology and the decrease in staff are some of the contributing factors that lowers a staffs' morale and motivation. The following are some strategies that managers can take into consideration to increase staff morale and motivation during restructuring:

➢ **Communication** – To prevent this from occurring managers at UKZN should have communicated with staff openly and honestly throughout the restructuring process. Rumours often fuel staff's low productivity and morale levels. Being honest and open with staff will prevent rumours from spreading in the organisation. Managers should create a safe space for employees to ask any question and receive feedback timeously. Cooper et al. (2012) conducted a study on restructuring and according to their research, staff did not trust top management in comparison to their direct line managers. Trust forms an essential link between employees and managers. Uncertainties derived from the work environment and business strategies results in trust gaps between managers and employees, which inevitably affects the restructuring process. Staff will be concerned and fearful of losing their jobs which inevitably affects their health (mentally and physically) as well as their morale and motivation.

➢ **Rewards** – Within the university the recognition in the form of rewards, motivates staff and gives them the sense of value and self-worth. Rewards also form a token of appreciation for work well done which increases the morale and motivates staff to want to do more. During the restructuring process staff should be properly rewarded where applicable.

➢ **Social Support** –UKZN management should have been supportive of their staff during the restructuring process. Landy & Conte (2010) explains that social support from managers and work colleagues reduces occupational stress. Managers need to support staff during restructuring so that the amount of stress that comes with restructuring is immensely reduced, resulting in happier and more motivated staff.

➢ **Psychosocial wellbeing** – At UKZN management should have allowed employees to express their feeling without fear of intimidation and there should have been active support systems available like well-being programs and employee assistance support. Jong, Weizer, de Weerd and Nielsen (2016) argue that restructuring has a negative impact on the survivor's well-being which is associated with job insecurity. Managers should ensure that a culture of positive well-being and good health is fostered within the organisation.

Concluding Remarks
During the restructuring process, management at the University had an obligation to communicate effectively to staff during this process. Transparency during the process is also very important. From the study, it can be seen that the restructuring process had a negative impact on staff morale, motivation and overall productivity. Staff were highly stressed during the restructuring process and felt helpless. Since, human resources is a crucial asset of any institution, it has to be managed with care. The University in the future must do more to make sure that their staff wellbeing is safeguarded during such stressful processes of engagement. Change is very difficult for any human being and when ones job is threatened, staff often feels demotivated and unproductive. It is for the university management to be honest and open with their staff. This would have prevented unnecessary rumours from spreading in the organisation, which caused productivity and morale to decrease. Managers should create a safe space for employees to ask any question and receive feedback timeously.

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Paper 38

South African E-retailer customer satisfaction and loyalty: The effects of website design and security

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Abstract: Online retailing in Africa has grown since 2015, with 10% of retail sales emanating from e-retailers, providing e-retailers in Africa with opportunities to acquire and retain customers. Previous studies have found that website design has a significant influence on customer loyalty, while website security was found to be an inhibiting factor for online purchasing. Although similar studies have been done, few consider the constructs from an African perspective. Underpinned by the expectation-confirmation and information systems continuance (ISC) theories, this study determines the effect of website design and security perceptions on customer satisfaction and loyalty, and integrates aspects of information systems and marketing. A non-probability convenience sampling method was used to obtain 360 usable responses and to measure the constructs 'website design', 'security', 'satisfaction', and 'loyalty' from South African respondents who had previously purchased from an e-retailer. Data were analysed using Confirmatory Factor Analysis (CFA) and multiple regression. The results show 'website design' to be the largest predictor of customer satisfaction, with 'satisfaction' being a predictor of loyalty. E-retailers targeting African consumers need to consider website content, ease of navigation, and aesthetics, as these convey a message of e-retailer quality to the consumer that is essential for customer satisfaction, loyalty, and long-term success.

Keywords: *Website design, Security, Customer satisfaction, Customer loyalty, E-commerce.*

1. Introduction

In recent years, many African countries, including Nigeria, Tanzania, Ghana, and South Africa, have experienced an upsurge in their economic growth and development. Many of these sub-Saharan countries have contributed to the increased Gross Domestic Profit (GDP) growth rates in the region (Africa Business, 2018). In 2017, GDP growth was estimated at 6.6 per cent per annum, and it is expected to grow steadily (Africa Business, 2018). The high GDP growth rate means that sub-Saharan Africa is growing faster than Asia. This can be attributed to various factors, one of them being mobile and internet penetration.

Mobile (and therefore internet) penetration in these countries is booming. In South Africa, mobile penetration for 2019 stands at 81 per cent, with more than half the population having a mobile phone (Gilbert, 2019). Mobile penetration in Nigeria, Tanzania, and Ghana is 84 per cent, 94 per cent, and 119 per cent respectively (Anamah, 2018; Xuequan, 2018; Tamakloe, 2018). The increasing demand for mobile phones can be attributed to the growing need to access and use the internet. These emerging markets ensure that improved infrastructure is put in place, thus enabling greater access to the internet. Through improved infrastructure, systems are being automated and upgraded to be more sophisticated and thus to appeal to the emerging middle class (ICASA, 2019).

Much of the middle-class consumer market in African countries relies on mobile devices, and specifically on smartphones, to access and use the internet (Gilbert, 2019). Across the African continent, the number of smartphone users almost doubled, with an estimated 226 million users in 2017 (Dahir, 2016). In South Africa, the number of smartphone users increased from 52 per cent in 2016 to 63 per cent in 2017 (Business Tech, 2018). The increase in smartphone usage has been a crucial driver of Africa's thriving online retail industry. Through mobile usage, online retailing in Africa is expected to account for 10 per cent of total retail sales by 2025, which is valued at USD$ 75 billion (Faku, 2018).

E-retailers have had to adapt their websites to be more mobile-friendly in order to appeal to consumers. Having a good website design facilitates better decision-making (Bilgihan, Kandampully & Zhang, 2016). Previous studies have proved that website design influences information search, purchase intention, and post-purchase behaviour, including satisfaction and loyalty (Dadeke, 2016; Ling, Fern, Boon & Huat, 2016; Winnie, 2014). Crucial aspects of web design, including aesthetic appeal and user interface quality, need to be considered. Moreover, the perception of security when purchasing online is key to consumer decision-making. Security perceptions are associated with risk: if the website of the online retailer is perceived to be less secure, there is an increase in the risk associated with purchasing from that online retailer. Security perceptions and higher risk were found to impact purchase intention negatively and to have an indirect effect on satisfaction and loyalty (Cui, Lin & Qu, 2018; Rizan, Bakar & Saidani, 2015; Ali, 2016).

Emerging economies in sub-Saharan Africa are piquing the interest of foreign direct investors; understanding their consumers is therefore vital. Moreover, online retailing is growing rapidly due to mobile and smartphone penetration rates and improved infrastructure that offers access to the internet (Kende, 2017). Although many previous studies have investigated the impact of website design and security perceptions on consumer decision-making, few have aimed to investigate this relationship from a sub-Saharan perspective. This study therefore aims to investigate the impact of website design and security perceptions on satisfaction and loyalty in South Africa.

2. Literature Review

The literature review will discuss the main theories underpinning the study, including expectation confirmation theory and information systems continuance theory. Thereafter, the proposed constructs in the model – web design, security perceptions, satisfaction, and loyalty – will be explained in detail.

Expectation confirmation theory

The expectation confirmation theory (ECT) was developed by Oliver in 1977 (Oliver, 1977). The ECT is used to explain the process that consumers undergo to reach satisfaction with their purchase (Oghuma, Libaque-Saenz, Wong & Chang, 2016). In order to become satisfied, the ECT posits that expectations and perceived performance are key, and that both are mediated by disconfirmation (Oghuma et al., 2016). Expectations are defined as beliefs about the value of an activity or event that are grounded in an individual's values, which serve as a source for comparison (Jiang & Klein, 2009). 'Performance' refers to the perceived level of success of an activity or event that has already happened; and 'disconfirmation' is then the discrepancy between the two (Jiang & Klein, 2009). It is argued that, when product performance surpasses expectations, there is positive disconfirmation, which leads to greater satisfaction (Oliver, 1980). Conversely, if product performance does not meet expectations, then there is negative disconfirmation, leading to higher levels of dissatisfaction (Oliver, 1980). Earlier information systems studies by Hseih and Wang (2007) and Liao, Chen and Yen (2007) have proved that disconfirmation does indeed influence satisfaction.

In the current study, expectations and perceived performance will be measured in terms of website design elements and security. These factors include utilitarian features and security perceptions. The effects of these elements will determine the level and type of disconfirmation, which will then be used to analyse its effects on satisfaction. A previous study conducted by Verhagen and Van Dolen (2009) discovered that customer satisfaction strongly depends on the quality of website design, including convenience and aesthetic appeal. Another study, by Ha and Kim (2012), found that website design, including aspects relating to the colours, fonts, and images used, increases positive perceptions about the site, and have a strong and positive influence on customer satisfaction. Although these studies have proved that there is a relationship between website design and customer satisfaction, they were conducted in the Netherlands and the United States of America – both developed nations (Ha & Kim, 2012; Verhagen & Van Dolen, 2009). Therefore, there is a need to understand the relationship between these variables from an emerging markets perspective. The ECT has been criticised for not exploring the influence of satisfaction on overall post-purchase behaviour, such as repurchase intention and loyalty (Bhattacherjee, 2001). Because of this limitation, the information systems continuance model was developed.

Information systems continuance theory
The information systems continuance theory (ISCT) was developed to address some of the limitations of the ECT. The ISCT builds on the ECT and includes perceived usefulness, disconfirmation, satisfaction, and continuance intention (Bhattacherjee, 2001). 'Perceived usefulness' is defined as an individual's perception of the benefits of using information technologies (Bhattacherjee, Perols & Sanford, 2008). The ICST suggests that perceived usefulness is the main factor in determining continuance intention (Alraimi & Ciganek, 2015). 'Continuance intention' refers to the willingness to continue using information technologies. The theory argues that consumers go through various stages before reaching a post-purchase decision (Alraimi & Ciganek, 2015). First, consumers form an expectation about a product or service (in this case, a website). Second, consumers then determine whether the product or service (website) meets or surpasses their initial expectations (Bhattacherjee, 2001). The discrepancy between expected and actual expectation determines their disconfirmation. If there is positive disconfirmation, consumers tend to be satisfied (Bhattacherjee et al., 2008). The level of satisfaction then influences whether they repurchase or continue using information technologies (the website) (Alraimi & Ciganek, 2015). If consumers are satisfied, they are more likely to continue using the product or the website, whereas if they are dissatisfied, they will be less likely to continue using the product or website (Bhattacherjee et al., 2008). Bhattacherjee et al. (2008) then aimed to extend the ISCT to focus on behaviour, as opposed to intention only. Many studies have been grounded on this model, and focus on behavioural outcomes such as loyalty and post-purchase habits (Limayem, Hirt & Cheung, 2007; Valvi & West, 2013).

The current study aims to investigate the impact of website design and security perceptions on satisfaction and loyalty from an emerging markets perspective. Previous studies have found that website design, specifically the usability of the site, positively influences satisfaction, which then translates into strong, direct, positive associations with e-loyalty and repurchase intention (Valvi & West, 2013). A study conducted by Wolfinbarger and Gilly (2003) established that website design and security did indeed influence satisfaction with and customer loyalty towards the online site. Another study, in the banking industry in Korea, found that perceived security and privacy influenced trust but not user satisfaction; yet the perceived usefulness of the online banking site significantly influenced satisfaction and continuance usage intention (Susanto, Chang & Ha, 2016). Paul and Jacob (2017) aimed to investigate the influence of satisfaction, trust, and habit on loyalty (continuance intention) with regard to online shopping sites. They discovered that all three constructs have a significant impact on loyalty and continuance intention. Despite the relevance of these previous studies, few of them aim to investigate specific website design aspects and security perceptions and their influence on satisfaction and loyalty from an emerging markets perspective. This justifies the need for the current study.

The next section of the literature review discusses the main constructs in the proposed model, including website design, security perceptions, satisfaction, and loyalty.

Website design
Gibbs and Gretzel (2015) describe 'website design' as the way in which the website is created or designed, and focus on various elements. These elements can be characterised as the utilitarian and hedonic features of a website. 'Utilitarian features' relates to the perceived utility or performance of the website, and includes its aesthetic appeal, convenience, usability, and navigation (Moon, Khalid, Awan, Attiq, Rasool & Kiran 2017). 'Aesthetics' refers to the physical/tangible aspects of the website such as the colour, font, and graphics used (Stein & Ramaseshan, 2016). 'Convenience' relates to the ease of accessing and using the website for purchase-related decisions. Bilgihan et al. (2016) describe 'usability' as the perceived ease of use of the website and the ease and efficiency of accessing relevant information. Finally, 'navigation' relates to the ability to move around on the website and easily find information relevant to customer needs (Stein & Ramaseshan, 2016). Conversely, 'hedonic features' relates to the sensory experiences and emotions that arise when using a website. For most consumers, online shopping is enjoyable and creates positive moods and emotions (Moon et al., 2017). Customers tend to feel good when they shop online, which increases their intention to revisit a website. Creating a pleasant shopping experience online is a potential driver of customer satisfaction (Bilgihan et al., 2016).

Website design has become a popular research area, as many studies have discovered that the design of a website can provide numerous benefits for e-commerce (Bilgihan, et al., 2016). Some of these benefits include an enhanced shopping experience for consumers, more traffic to the website, higher conversion rates, and better website analytics (Bilgihan et al., 2016; Gibbs & Gretzel, 2015). These benefits are crucial in distinguishing retailers' websites from one another, and are often the reason why consumers prefer one website over another (Gibbs & Gretzel, 2015). Previous studies have discovered that these website design elements have a positive, significant influence on user experience; however, few aim to investigate the impact of these elements on customer satisfaction and loyalty from an emerging markets perspective, and specifically within sub-Saharan Africa. One study, conducted in the United Kingdom, proposed and theoretically concluded that one of the outcomes of online customer experience is repurchase intention (Rose, Hair & Clark, 2012). Another examined the influence of website design on online customer experience and word-of-mouth in the United States of America (Bilgihan et al., 2016). A study conducted in Taiwan found that website design influences satisfaction and loyalty, provided that consumers trust the website; however, this was specifically for B2B websites (Hsu et al., 2013). Based on these comments, there is a lack of knowledge of this topic in sub-Saharan Africa – which poses a problem, as many consumers use retailers' mobile websites to purchase products. Therefore, understanding the impact of website design is vital. The following hypothesis is proposed:

H1: Website design has a significant and positive relationship with customer satisfaction.

Security perceptions

'Security online' refers to the safeguarding of personal customer information from any unauthorised use, disclosure, or distribution for purposes other than the online transaction on a specific website (Ludin, Hila & Cheng, 2014). Customers value online security, and many customers feel that providing their personal and credit card details online is not safe (Seckler, Heinz, Forde, Tuch & Opwis, 2014). They associate higher risks with online transactions, as they cannot guarantee that their information is safeguarded; and this therefore reduces trust (Hsu et al., 2013). Trust plays a major role in ensuring that customers feel comfortable providing their details and making an online transaction (Ludin Hila & Cheng, 2014; Seckler et al., 2014). A lack of trust has been proved to have a negative impact on consumers who make online purchases (San-Martin & Camarero, 2018). Therefore having a trusted website is crucial for e-retailers.

Establishing trust in an online context is difficult due to the lack of interaction between the consumer and an e-retailer. E-retailers rely on their websites to build trust with their customers (Tarmedi, Sulastri Sumiyati & Dirgantari, 2018). In a study conducted in Switzerland, it was discovered that complex layouts and structural design issues (such as having pop-up advertisements) led to distrust, whereas having reviews and recommendations posted by friends and family on these websites increased trust (Seckler et al., 2014). Another study, conducted in Malaysia, discovered that customer trust can be enhanced by e-retailers by paying attention to an available security system on their websites, having positive reviews about the website, and having a reliable website design (Tarmedi et al., 2018). Many previous studies have also aimed to explore the behavioural outcomes of trust on consumer decision-making, with specific reference to satisfaction and loyalty. A study conducted by Chou, Chen and Lin (2015) on online female clothing shoppers found that alleviating the online privacy and online security concerns, and enhancing the online customer experience through website design, influences females' e-trust and e-satisfaction respectively, which then form their e-loyalty. Conversely, Ludin Hila and Cheng (2014) discovered that, although website design and security perceptions influence trust, both are insignificant in respect of satisfaction. From the results of these studies, it is evident that security perceptions, and their influence on satisfaction and loyalty, need to be studied further. Security perceptions are a key concern in online decision-making among consumers in emerging markets. This can be attributed to higher crime rates – specifically, cybercrimes (Antonescu & Birău, 2015).

Cybercrime attacks are on the rise, especially in emerging markets. Emerging markets are at a higher risk of exposure to cybercrimes due to their inherent vulnerabilities, including structural and institutional imbalances (Antonescu & Birău, 2015). In most emerging African-market companies, there is a lack of awareness about cybercrimes. Many of them do not have the correct infrastructure, and are more likely to experience higher risks of being hacked (Smith, 2019). South Africa was discovered to have the third highest

number of cybercrimes in the world, resulting in an estimated loss of R2.2 billion annually due to cyber attacks (The Mercury, 2018). There are an estimated 14 000 attempted cyber-attacks every day, with Android mobile phones being one of the most targeted devices (Smith, 2019). The most common cybercrimes include identity theft, phishing, and ransomware (The Mercury, 2018). Cybercrimes have a negative impact on consumers' perceptions of trust and their satisfaction with an online retailer (Ali, Samsuri, Sadry, Brohi & Shah, 2016). It is therefore essential that the impact of security perceptions on decision-making is studied, due to the high cybercrime rate and the negative perceptions associated with website security, especially in sub-Saharan Africa. Therefore:

H2: Perceived online privacy and online security have a significant and positive relationship with customer satisfaction.

Customer satisfaction
Customer satisfaction occurs after purchase, and forms part of the post-purchase decision stage in the consumer decision-making process. Zeithaml and Bitner (2003) define 'customer satisfaction' as a customer's feelings of pleasure or displeasure resulting from the discrepancy between their expectations and the product's perceived performance. When the customer's expectations are met or exceeded by the perceived product performance, then satisfaction results; however, when the customer's expectations are not met by the product's perceived performance, then dissatisfaction results (Hoffman, Bateson, Wood & Kenyon. 2009). Customer satisfaction provides many benefits for a company and/or brand. First, satisfied customers are more likely to share their positive experiences through word-of-mouth and electronic word-of-mouth (Sivadas & Jindal, 2016). Second, having satisfied customers defends the company and/or brand against competitive pressures such as price and promotions from competing companies and/or brands (Hoffman et al., 2009:369). Last, satisfied customers are more likely to repeat their purchase (Shaon & Rahman, 2015).

In an online context, customer satisfaction stems from the type of experience obtained when using a website. If the website is easy to use, accessible, convenient, and easy to navigate, then customers tend to be satisfied with the website design (Stein & Ramaseshan, 2016). Moreover, website designs that build trust and confidence and reduce the perceived risk associated with security tend also to increase the satisfaction obtained from using that particular website (Tarmedi et al., 2018). Although achieving satisfaction among users is important, the behavioural outcomes associated with satisfaction are of greater importance to a company/brand. One of the expected outcomes of online customer satisfaction is loyalty (Chou et al., 2015). Many studies have investigated the impact of satisfaction on loyalty. This is discussed in detail in the next section.

Customer loyalty
'Loyalty' is defined as a deep commitment to repurchase a product or service consistently, both now and in the long term (Boshoff & du Plessis, 2009). Customers tend to develop loyalty towards a brand if they derive some sort of value and satisfaction from it (Boshoff & du Plessis, 2009). In an online context, 'loyalty' refers to the commitment consistently to revisit a website, based on the type of experience obtained from using that website (Rahi et al., 2017). A study conducted by Pee, Jiang and Klein (2018) found that perceived website usefulness and satisfaction were indeed strong antecedents of loyalty. Another study, conducted in the Pakistani banking industry, discovered that website design is one of the most influential factors for establishing customer loyalty (Rahi et al., 2017). Moreover, having a website design that fosters trust in users and reduces the perceived risk associated with security is crucial in determining whether a user will revisit a website (Tarmedi et al., 2018). A study conducted by Winnie (2014) found that trustworthiness was positively related to loyalty, suggesting that the more customers trust the website, the more likely they are to revisit the website in future (Winnie, 2014). Among these studies, many have found that satisfaction is a mediator between website design, security perceptions, and online loyalty (Pereira, de Fátima Salgueiro & Rita, 2016; Giovanis & Athanasopoulou, 2014; Chou et al., 2015). With this in mind, the following hypothesis is proposed:

H3: Customer satisfaction has a significant and positive relationship with customer loyalty.

Based on the literature review and the hypotheses above, Figure 1 indicates the conceptual model tested for this study.

Figure 1: Conceptual model
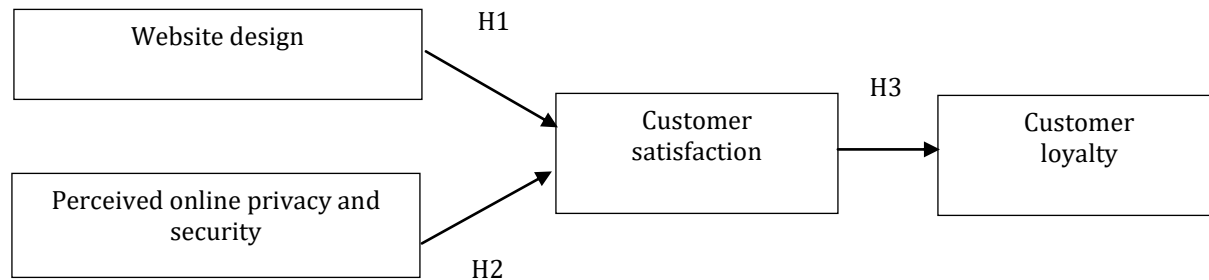
Problem statement

Emerging markets in sub-Saharan Africa are proving to be most attractive for foreign direct investment due to their growing economies, improved technological infrastructure, and sophisticated middle-class consumer market (Kende, 2017). Despite their growing appeal, most research on emerging markets and online technologies is focused on India and China, and specifically on their consumer markets. Empirical studies are therefore necessary to investigate the impact of online technologies on consumer behaviour in sub-Saharan Africa and, in the case of this study, South Africa.

In South Africa, online retailing is becoming a force to be reckoned with due to the increasing sophistication of mobile devices (Gilbert, 2019). Consumers rely on their mobile devices to inform their decision-making. The emerging middle-class consumer is technologically savvy and demands convenience, yet is still sceptical about purchasing online (Izogo & Jayawardhena, 2018). Many consumers attribute their scepticism to the lack of proper security for online transactions, and fear about their credit card details being stolen, cyber-attacks, and identity theft (Antonescu & Birău, 2015). South African consumers tend to feel more fearful than consumers from other countries due to the high prevalence of crime in South Africa (Smith, 2019). It is therefore crucial for e-retailers to understand consumers' perceptions of security and the impact they have on their decision-making – specifically, their satisfaction and loyalty.

E-retailers should also determine the impact of the aesthetic and user interface quality factors of their website design on consumer decision-making. Bilgihan et al. (2016) state that the increasing number of e-retailers and e-commerce websites means that competition is intensifying. In order for e-retailers to differentiate themselves, their focus should be on creating a website design that is unique and that appeals to the needs of their target markets (Moon et al., 2017). Although many previous studies have been conducted on website design and its impact on purchase intention and loyalty, the majority of these studies have been carried out in developed markets or in thriving emerging markets such as those of Asia. Therefore, there is a need to investigate the impact of website design on satisfaction and loyalty among consumers in an African market.

The aim of this study, therefore, is to contribute to the limited knowledge on website design, security perceptions, satisfaction, and loyalty in sub-Saharan African countries, and specifically in South Africa. The secondary objectives set for this study are these:
- To identify whether website design influences customer satisfaction for customers purchasing online.
- To determine whether perceived online privacy and security influences customer satisfaction for customers purchasing online.
- To identify whether online customer satisfaction influences online customer loyalty.

3. Research Methodology

The research philosophy underpinning this study is of a positivistic nature; thus a descriptive and quantitative design and approach was followed. Structured questionnaires adapted from the studies of Park and Kim (2003), Rose, Clark, Samouel and Hair (2012), and Kumar and Anjaly (2017) were used to collect data using a non-probability convenience sampling method. Sampling elements were any persons over the age of 18 residing in Gauteng, South Africa who had purchased from an online retail store (e.g., Takealot.com, Amazon.com, Apple App store, Pick n Pay online, Google Play, Superbalist, Zando, etc.) in the six months prior to the data collection. Section A of the questionnaire included questions about the demographics of the respondents and their online purchase behaviour. Section B, measured on a five-point unlabelled Likert scale, with anchor points of 1 = strongly disagree and 5 = strongly agree, included questions measuring website design (nine items), online privacy and security (four items), online satisfaction (seven items), and online loyalty (four items). Fieldworkers were used to distribute the questionnaires in person and, before completing the questionnaire, respondents were informed of the purpose of the study and their rights as respondents, and were asked to give their informed consent. Respondents were also assured of their anonymity when participating in the study.

After cleaning the data, a total of 360 questionnaires were retained for analysis using SPSS version 25. Before any data analysis was conducted, the normality of the data was tested using the Shapiro-Wilk test, which indicated that the data was normally distributed. Normality was also identified through skewness and kurtosis, which showed that the data was normally distributed, as the data points were within the parameters of the absolute values of 7 for kurtosis and 2 for skewness. Based on these results, the data was subjected to an exploratory factor analysis (as three existing questionnaires were combined for this study) and then a confirmatory factor analysis to confirm the structure.

Factor analysis

The data met the criterion for conducting a factor analysis: there were more than 10 subjects to items, as suggested by Pallant (2016). The Kaiser-Meyer-Olkin (KMO) value was above the recommended value of 0.6 (KMO value of 0.946), and Bartlett's test of sphericity was $p \leq 0.000$, indicating that the data was suitable for factor analysis (Pallant, 2016). As the data was normally distributed, the maximum likelihood method was used with a varimax with Kaiser normalisation rotation. This method allows for the calculation of goodness of fit indices and statistical significance testing of factors (Fabrigar, Wegener, MacCallum & Strahan, 1999). The Exploratory Factor Analysis (EFA) indicated that four factors – website design, perceived online privacy and security, customer satisfaction, and customer loyalty – could be identified (no items had to be removed). This structure was then confirmed using a confirmatory factor analysis. Table 1 indicates the construct (factor), the variance each construct explained, and the Cronbach's alpha value to test the reliability of the scale.

Table 1: Constructs, variance explained, and Cronbach's alpha values

Construct	Total variance explained by each factor	Cronbach's alpha
Website design	20.25%	0.908
Customer loyalty	19.73%	0.910
Perceived online privacy and security	13.69%	0.857
Customer satisfaction	10.80%	0.940

From Table 1 it can be determined that the total cumulative variance explained by the four factors is 64.47%. The table also indicates that the scales are reliable, as all the Cronbach's alpha values for each construct are above the 0.6 level.

Regression

A multiple regression was used to test the conceptual model and hypotheses of this study. Before this analysis was conducted, it needed to be determined whether the data met the assumptions of multiple regression analysis. In this case, the sample size was sufficient for multiple regression, as it exceeded the parameters of

the formula provided by Tabachnick and Fidell (2007), which states that the sample size should equal or exceed N > 50 + 8m, where m reflects the number of independent variables in the model. According to this formula, in order to conduct a regression analysis, the sample size for this study should exceed 74. In this study the sample size was 360. For multicollinearity, the correlation variables were lower than the 0.7 cutoff, the collinearity value of tolerance was 0.6 or less, and the variance inflation factor was 2.5 or less – below the threshold of 10. No outliers were identified from the scatterplot. All the conditions of multiple regression were therefore met.

4. Results

A multiple regression was used to test the conceptual model and hypotheses. Figure 2 presents the beta values and the p-values for each of the hypotheses.

Figure 2: Results for the model
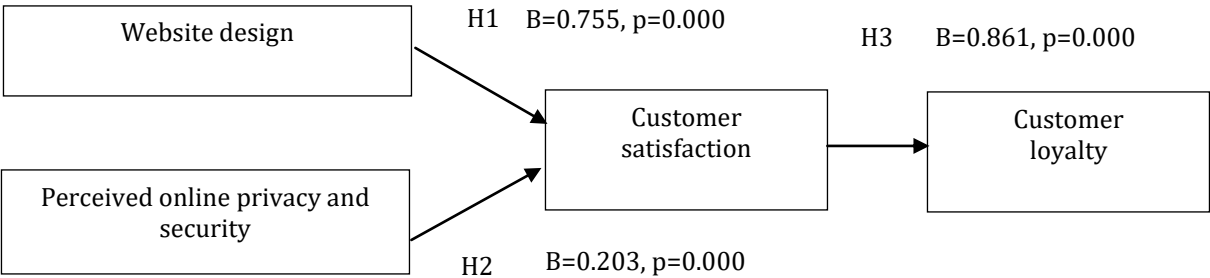
The results of the model showed that 60.4% of the variance is explained by customer loyalty, and the model is statistically significant with p = 0.000. It was determined that there is a statistically significant result for website design and customer satisfaction, and that website design is the largest predictor of customer satisfaction. Therefore Hypothesis 1 can be accepted (p = 0.000, B=0.755). The results also indicate that Hypothesis 2 can be accepted, as there is a statistically significant relationship between perceived online privacy and security and customer satisfaction. In terms of Hypothesis 3, the analysis indicated that there is a statistically significant relationship between customer satisfaction and customer loyalty (p = 0.000, B=0.861); this is a large predictor of customer loyalty, indicating that Hypothesis 3 can be accepted.

Managerial Implications

The results of the study show that respondents in South Africa who purchase online value website design as the most important factor when considering how satisfied they are with their online retailer. This study therefore supports the results from the study by Gibbs and Gretzel (2015), who indicated that website design is how a competitive advantage can be obtained over other online retailers. Although perceived online privacy and security reveals statistically significant results, it was not the largest predictor of online customer satisfaction. This could be explained by the results of Chou et al. (2015) and Seckler et al. (2014), who found that having a website that is well designed and reliable, that is simple to use, and that does not make use of many third party advertisements, creates a feeling of trust and security among customers. The study also found that respondents needed to be satisfied with the website design and perceived online privacy and security before they would consider being loyal to the online retailer. This is supported by Shaon and Rahman (2015), who indicated that customer satisfaction is required before repeat purchases and loyalty can be developed. Based on the findings of the study, in order to reap the benefit of customer satisfaction and loyalty (which can lead to increased purchases, lower price sensitivity, and positive e-word of mouth (Sivadas & Jindal, 2016), the following are recommendations for online retailers:

- The website should create a shopping experience that draws the customer in and retains them by developing a well-designed website that has embedded safety and security. This requires that the

website be easily accessible and easy to use and navigate, and that all pertinent payment and security information be clearly displayed. This is especially important for South African consumers, who are sceptical of providing their personal and credit card details on websites.

- Create a sense of security on the website by ensuring that accurate and real reviews are displayed, and allow customers to provide their own reviews. This is very important from an African perspective, as reviews from customers' friends and family are one of the major factors in whether or not someone will purchase from a retailer (Seckler et al., 2014). A sense of security can also be created by having third party accredited payment websites (such as PayPal) that consumers perceive as trustworthy.
- The online retailer should also clearly indicate that various payment methods are available (e.g., EFT, use of a voucher, etc.), and not just rely on credit card payments. They should also ensure the confidentiality of customers' details, as security and online identify theft is a major concern for South African consumers (Antonescu & Birău, 2015). The website should clearly indicate the security measures taken and what the e-retailer will do as a guarantee against problems, such as lost products, wrong deliveries, etc.
- From a South African perspective, ensure that the website is compatible with a mobile app, and that the app has all the necessary features and design and security elements from the website. This is essential, as the majority of South Africans rely on their phones to connect to the internet and to make online purchases (Antonescu & Birău, 2015).
- Online retailers operating in South Africa need to ensure that they consistently provide good service through their websites, and that it is easy for customers to purchase from them while minimising the risk involved. This requires that efficient and effective customer service links are provided on the website. Only once customers are satisfied with the website design and the embedded privacy and security elements will customers consider becoming loyal.

5. Conclusion

This study considered the impact of website design (e.g., it is easy to use, easy to navigate, and has pleasing aesthetics) and the privacy and security that the e-retailer offers on customer satisfaction and loyalty. The results indicate that website design is the largest predictor of online customer satisfaction. Although perceived online privacy and security did have a significant relationship with customer satisfaction, online customers in South Africa would rather see privacy and security embedded in the website design due to the high rates of online theft and cybercrime. The results indicate that customers would become loyal only once they were satisfied with their online retailer. The results are valuable from a South African perspective, specifically considering the results of privacy and security. Online retailers need to consider the results of this study, as focusing on its recommendations could lead to higher levels of trust among customers, generating positive word-of-mouth, and potentially leading to increased and repeat sales and less price sensitivity among customers (Shaon & Rahman, 2015).

Acknowledgement

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