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MONITORING AND EVALUATION IN A CHAOTIC AND COMPLEX GOVERNMENT INTERVENTIONS' ENVIRONMENT

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–Abstract–

This paper analyses the factors that influence Monitoring and Evaluation (M&E) of government interventions in a chaotic and complex organisational environment. The central argument is that many factors from the natural and man-made (intellectual) environment affect the evaluation of government interventions. However, despite approximately three decades of M&E studies, there is currently no known study that has focused on the effects of the different factors that influence the M&E of government interventions. The objective of this paper is to critically analyse the effects of different environmental factors on M&E of government interventions. This paper is an attempt to close the knowledge gap in the current literature. This research is qualitative and is based on a robust literature review of the existing literature on M&E and the theory of change, chaos and complexity. The research followed an interpretive, social constructivist paradigm which basically starts from an assumption that when M&E experts, scholars and practitioners construct meaning of their world, and in making sense of that world, they are influenced by their historical, economic, social and cultural backgrounds. This paradigm resonates well with the research's central objective of identifying, explaining and interpreting the environmental factors that influence M&E. The main finding in this paper is that there are many natural and intellectual (man-made) environmental factors that affect M&E. Change caused by these environmental factors is chaotic, complex and unpredictable. The effects of these environmental factors on the M&E of government interventions is inevitable because organisations are open systems. An M&E endeavour which ignores the effects of natural and intellectual (man-made) environmental factors on M&E cannot produce accurate information and valid recommendations. Therefore, M&E scholars, professionals and practitioners should take into account the environmental context in which M&E is done in order to produce more accurate M&E results and valid recommendations.

Key Words: Monitoring and evaluation, M&E, public policy, chaos and complexity, open systems, act of God, internal environment, external environment

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1. INTRODUCTION

The objective of this paper is to evaluate the factors that influence M&E of government interventions in a chaotic and complex organisational environment. The paper starts with a conceptual analysis to explain M&E of government interventions and proceeds with a contextual analysis to discuss the causes of chaos and complexity in the M&E of government interventions and the environment and how such chaos and complexity within the organisational complicate/affect M&E. The paper concludes with a brief discussion of what can be done to evaluate government interventions in a complex and chaotic organisational environment and the recommendations for future research.

2. MONITORING AND EVALUATION (M&E): A CONCEPTUAL AND CONTEXTUAL ORIENTATION

Monitoring is “a continuous function/process that uses systematic methods to collect data on specific performance indicators of government interventions in order to provide management and the main stakeholders with facts and evidence for failure or success of an ongoing development intervention in order to track the extent of progress towards the achievement of objectives and progress in the use of allocated funds” (Kusek and Rist, 2004:12). Monitoring requires an up-to-date documented plan of the intervention, showing clearly what government intervention is being implemented, when it must be implemented (start date, mid-term milestone dates, completion date), where exactly the intervention is supposed to be implemented, why it is implemented (the registered/recorded problem or problems that necessitated the intervention in question), who the beneficiaries and/or stakeholders are, who is responsible for what actions in the implementation process, how everything must proceed, etc. (Nalubega & Uwizeyimana, 2019:2). Monitors (or monitoring officers) must record the data (and information) about the status (progress) of the government intervention as they see it happening (but do not have to explain why) (Uwizeyimana, 2019).

A closer look at Bloom, Englehart, Furst, Hill, and Krathwohl’s (1956) Taxonomy in Figure 1 shows that monitors only need to see, observe, recognise, and recall the facts (i.e. to remember) and to (correctly) capture the observed facts in a record system (a database, datasheet, and/or an electronic device such as a

computer). Monitoring must be conducted on regular basis (hourly, daily) in order to avoid missing valuable data and information. This is why the concept of monitoring is also defined as the ability to systematically track progress made against the adopted plan on a regular basis and to ensure compliance with the aspects contained in the (implementation) plan (Ho, 2003:68-70). Monitoring progress in terms of “outputs” gathers data on service delivery and policy implementation, while monitoring progress in terms of “outcomes” gathers and presents data on the worth and value of the intervention itself (Ho, 2003:68-70). The function of monitors (or monitoring officers) is important because they help to capture (record and safely store) data and information that are used to conduct evaluations.

Evaluation uses and depends on the data and information collected through systematic monitoring of government interventions (Salandy, 2018). As such, monitoring is a prerequisite for evaluation because without it, it is almost impossible to objectively “determine the relevance and fulfilment of objectives, development efficiency, effectiveness, impact, and sustainability” of government interventions (Rabie and Goldman, 2014:4-6). One must therefore conduct systematic and objective monitoring of government interventions in order to evaluate their performance (Saunders, 2015:3).

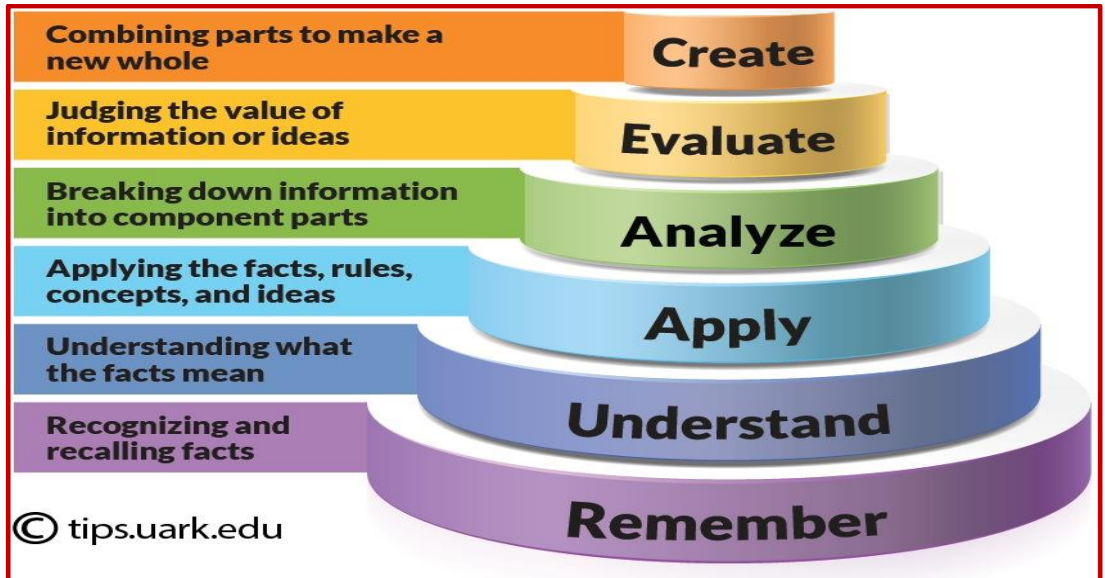
Rabie and Cloete (2009:2) distinguish between formal and informal evaluation. They argue that “informal evaluations inform daily decisions on how good or bad, desirable or undesirable something is” and that formal evaluations are “more systematic and rigorous ... with appropriate controls for the effects of extraneous environmental factors that could have an impact on the validity and reliability of the findings and conclusions” (Rabie and Cloete, 2009:2). Evaluation should take a systematic approach to evaluate every aspect of the different parts of the logframe from the quality and quantity of the input, the efficiency and economy in the acquisition, and the allocation (or use) of the input, the efficiency in the transformation of the input into output, the quality and quantity of output, the effectiveness and efficiency of the output, the effectiveness and efficiency in how the output achieved the outcomes, to the efficiency and effectiveness in the way the outcomes have achieved the impacts (Uwizeyimana 2019). This means that systematic evaluation should go beyond focusing on the “intended output, outcomes and impact” (what) to include and explain (why) the [what] that is observed happened that way (Uwizeyimana, 2019).

Huitt’s (2011) “*Bloom et al.’s Taxonomy of the Cognitive Domain*” shows that evaluation is more than just comparing status quo ante (so-called baseline data:

before the policy project was initiated) and data at the cut-off point, which signals the end of the evaluation period (so-called end or culmination data) (Cloete, 2017:17) and is more about having the ability to analyse. The person who carries the title of or who is called an evaluator should possess the capacity to analyse (and is therefore an analyst) because evaluation is about “judging the value of information and ideas” (Huitt, 2011:1).

However, there is no better way to explain the concept “evaluation” and what evaluators do (or are expected to be able to do and the requisite cognitive abilities) than examining what Bloom *et al.*'s (1956) *Taxonomy of Educational Objectives: The Classification of Educational Goals* says about “evaluation” as a cognitive skill. According to Bloom *et al.* (1956), an evaluator must possess the highest level of cognitive abilities. According to Bloom *et al.*'s (1956) classification of educational goals, before a person qualifies as an evaluator or acquires the status of “evaluation expert (or practitioner)”, he/she must first successfully complete the different stages of cognitive domains. Firstly, the evaluator must be trained “to recognise and recall facts” (**remember**) about the evaluand (the object and subject of evaluation). Secondly, he/she must be able to understand what the facts mean (**understand**). Thirdly, he/she must be able to apply the facts, rules, and ideas (**apply**). Fourthly, he/she must be able to break down the information into component parts (**analyse**). The fifth stage, which is more applicable to this research, is possessing the abilities to judge the value of information and ideas (**evaluate**), and the sixth and final highest stage is the ability to **create**, which is explained as the ability to use the information before him/her to make recommendations for improvement and make evidence-based decisions on the way forward (Bloom *et al.*, 1956; Huitt, 2011:1-2). Following is Bloom's Taxonomy created by the University of Kansas and published on UARK.EDU.

Figure-1: Figure 1: Bloom’s Taxonomy in the form of a multi-tiered cake or “cake-style” hierarchy



Source: (University of Kansas and UARK.EDU, n.d.:2).

To understand the true meaning and the importance of evaluation, one must consider the position of evaluation in Figure 1. To evaluate is to “choose, estimate, judge, defend, criticise, justify” (Bloom *et al.*, 1956; Huitt, 2011:1-2). In order to be able to “justify”, one must “present facts or evidence, defend one’s opinion by making judgements about information”, and finally defending “the validity of ideas or quality of work based on a set of criteria” (Huitt, 2011:1). The ability to know what happened does not make one an evaluator. It is the ability to explain the meaning of what happened to the management, the stakeholders, and the beneficiaries, etc. and then to explain “why” what happened, happened the way it did, and to make evidence-based conclusions and recommendations for future improvement of the evaluand that distinguishes competent evaluators from false or incompetent ones. This is what makes evaluation “a higher-order policy management function”, as noted by Cloete (2009:309). That is why evaluation is placed at number five (second highest) just under “create” as the sixth and highest cognitive skill on the six “cognitive domains” (Bloom *et al.*, 1956). The author’s firm view is that evaluators cannot provide a valid and convincing explanation about why things have happened the way they did without complete knowledge

and appraisal of the different environmental factors or factors that have affected government interventions.

The fact that evaluators must deeply think about all output, outcomes, and impact (both positive and negative, intended and unintended, direct and indirect) and then think about all possible factors that could have led to the observed success or failure of the government intervention in terms of what they had set out to achieve, and why unexpected results are occurring (Bhikhoo and Louw-Potgieter, 2014:152) has also been advocated by Kusek and Rist (2004:12), who define evaluation as the systematic, objective, and contextualised assessment of an ongoing or completed government intervention from the design to the implementation and results. This view has also been advocated by the Organisation for Economic Co-operation and Development (OECD, 2002:21), which defines evaluation as the ability to determine the relevance and fulfilment of objectives, development efficiency, effectiveness, impact, and the sustainability of the results.

The definitions provided by the OECD (2002:2), Kusek and Rist (2004:12), Rossi, Lipsey and Freeman (2004:58,427), and Owen (2006:255) suggest that evaluation goes beyond the verification of “compliance to aspects contained in the plan” as suggested by Ho (2003:68-70) and includes planned and unplanned, intended and unintended, positive and negative, direct and indirect output, outcomes, and impacts of the interventions and their sustainability. According to Rossi, Lipsey and Freeman (2004:16), evaluation uses “social research methods in order to systematically investigate the effectiveness of social intervention programmes in ways that are adapted to their political and organisational environments...” The fact that the “results” of government interventions must be “relevant” implies that they must be relevant in terms of addressing the socioeconomic issues that affect communities, which also emphasises the importance of context or environment.

Finally, the emphasis on context in evaluation is also highlighted by Scriven (2003:7), who argues that while “evaluators need a repertoire of empirical research skills, they also require additional evaluative skills that enable them to search for ‘side effects’ that may influence the evaluation conclusion, determine relevant technical, legal and scientific values and synthesis skills to integrate evaluative and factual information.” Scriven’s (2003:7) emphasis on the importance of “side effects” is further confirmation that the M&E of government interventions does not happen in a vacuum. Scriven’s (2003:7) argument is supported by Woodrow and Oatley (2013:4), who also argue that M&E is conducted within the context or environment in which government interventions

take place. Following are the main categories of environmental and contextual factors that influence government interventions.

3. NATURAL ENVIRONMENT (ACT OF GOD) VERSUS INTELLECTUAL (ACT OF MAN, MAN-MADE) ENVIRONMENTAL FACTORS

The literature review shows that M&E takes place within two types of environments, namely the natural environment and the man-made environment. Natural environmental factors (also often called acts of God) include things that take place without human effort, desire, control, or intervention, such as earthquakes, climate change, draught, tsunamis, hurricanes, rain, sun, etc., but which have major impacts on human activities and human existence. For example, a government could decide to intervene in solving a housing problem in a particular community. While construction is underway, a hurricane (such as cyclone *Idai* which befell Mozambique, Malawi, and Zimbabwe in 2019) destroys villages, killing thousands of people, and destroying almost everything in its path, including government housing projects. A full explanation of their effects on the failure or success of these interventions must be emphasised in the evaluation report.

In addition, government interventions are also affected by anthropogenic (also called man-made or intellectual) factors. These are environmental factors that take place inside and outside the organisation as a result of human (physical and intellectual) action. For example, the success or failure of government interventions can be affected by political instability, prolonged labour union strikes, war, corruption, poor management or leadership, human laziness, or increased human productivity, which are all the result of human intellectual activities (behaviour, action, or inaction). Different types of man-made factors and their effects on government interventions are discussed in the following section.

3.1. Internal versus external environment factors

The **internal or micro environment** is generally within the parameters of the organisation and includes the “creation of the application of legislation, regulations, codes and rules, vision and mission, strategic objectives, management (role players), organisational arrangements and structures (infrastructure), policies and procedures, systems, [and] institutional resources (people, capital, skills)” (Uwizeyimana, 2018).

There are two main types of external factors. These include **external-meso** environmental factors, which occur outside the parameters of public institutions but at national (domestic) level. Factors from outside the organisation at national level include people, systems, resources, equipment, machinery, changes in existing laws or the introduction of new ones, demographic changes, levels of crime in society, etc. They also include technological factors (e.g. methods, computers, equipment, techniques, etc.), economical (e.g. fiscal arrangements, taxes, grants, etc.), social (e.g. unemployment, crime, etc.), political (e.g. legislation, political parties, etc.), cultural (e.g. diversity, religion, etc.), legal (e.g. regulations, policies, implications, etc.), and cultural factors (e.g. diversity, religion, language, etc.).

Other external factors are those that take place in the **external** or **macro** environment outside the country in the global (international) environment. They include factors such as the effects of the economic crisis of 2008 on national economies and budgets, the effects of global warming and climate change on local people, the effects of the trade war between the United States of America's President Donald Trump and China, etc. on exports and national budgets, especially in developing countries. For example, many developing countries depend on aid to fund their budgets and on Western development agencies to provide basic services to their people. Economic problems in Western countries have dire and direct effects on people in aid-dependent countries such as in Africa because Western donors tend to cut foreign aid to poor countries when they are facing financial crises at home.

In summary, natural and man-made phenomena inside and outside organisations exert one or a combination of different effects individually and all of them together exert a combined effect on government interventions. Their individual and composite effects could be tangible or intangible, visible or invisible, formal or informal, direct or indirect. The multiple effects from the influence of phenomena and actors within and outside organisations create a complex and chaotic web of effects on organisations and on government interventions and the environment in which the M&E of government interventions is conducted. The nature and causes of the chaotic and complex environment in which government interventions are implemented and evaluated are discussed next.

4. THEORETICAL ANALYSIS: THE THEORY OF CHAOS AND COMPLEXITY WITHIN THE M&E OF GOVERNMENT INTERVENTIONS ENVIRONMENT

Cloete (2006:2) and Kayuni (2010:30) argue that attempts to interpret, analyse, assess, or expand on the relevance of chaos and complexity for different aspects of public management have largely been undertaken in the early 2000s. However, there is no known study that has focused on the effects of chaos and complexity on the M&E of government interventions in the current literature. First of all, while there are common features between a complex and a chaotic environment, “the two concepts are different” (Rickles, Hawe and Shiell, 2007:933). A system becomes “*complex*” when it generates “rich, collective, dynamical behaviour from simple interactions between large numbers of its subunits” (Rickles, Hawe and Shiell, 2007:933).

Furthermore, interactions between and among sub-units within a complex system generate emergent properties in the unit system that cannot be reduced to the sub-units (Rickles, Hawe and Shiell, 2007:933; Morgan and McMahon, 2017:17). For example, it was argued above that multiple factors from the natural environment and intellectual (man-made) environment that exist within the internal and external environment of the organisation in which the M&E of government interventions takes place generate quite a large number of effects (political, economic, social, technological, legal, etc.). Each type of environment and each type of factor generated are sub-units of the organisational system. Organisations are faced with multiple factors from both within and outside their environments because they are open systems. Government institutions are open systems because they depend on the environment in which they operate; the environment is dependent on them and there is a specific interaction between the system and the environment. An open system requires “organisational inputs from the environment, organisational processing by the organisation, organisational output and feedback to the environment” (Bernhardt, 2018:47).

Cloete (2006:2) argues that chaos is not the same as complexity and a complex environment differs from a chaotic environment. As Cloete (2006:2) explains, even though complex systems carry a heightened level of complexity, they might be following webs of predictable patterns that can be identified and studied in a systematic manner, while chaotic environments are totally random and unpredictable. Cloete (2006:1) states, “Chaos is when everything seems to be on the verge of collapse in a particular moment (let’s say today), yet somehow and for some [unknown] reasons [the something] emerges at a later stage (tomorrow,

next week, next month or some years later) – in a new form with new structures or relationship.” Therefore, the use of chaos theory in the evaluation of government interventions is also concerned with “non-linear systems – systems in which an external change at local (micro) levels and at international (macro) levels causes disproportionate effects”, which randomly create new forms, new structures, and new relationships between the different units and subunits of an organisation (Muthan, 2015:15-17), which is argued to be an open system. The synonyms of the concept “random” are “chance, accidental, haphazard, arbitrary, casual, unsystematic, indiscriminate and unplanned” (Oxford English Dictionary, 2018).

According to Lomofsky (2016:9), what all this means is that change in the environment in which government interventions are implemented is chaotic simply because it is “beyond our control”, it is “dynamic and multidimensional”, it is “cumulative, with tipping points”, it is always “emergent and often unexpected”, it “involves people who behave in ways that we cannot predetermine and have agency (we cannot control what they do or how they think)”, and, finally, it “necessitates basing our programme design on evidence of what works; and does not take place in isolation and happens at different levels of the system” (Lomofsky, 2016:9).

The fact that an open system is affected by multiple factors from the internal and external environment (both natural and man-made) listed above in non-linear, unpredictable, and random ways that explain chaos in the organisation and its environments fits well with the phenomenon popularly known as the “butterfly effect” (Cronjé, 2014:21). The butterfly effect refers to “the phenomenon whereby a minute localized change in a complex system can have large effects elsewhere” (Basu, 2017:1). Schneider and Somers (2006:351) argue that Edward Lorenz “first encountered the butterfly effect while studying weather patterns, pointing to the inherent nonlinearity of such systems due to the high degree of inter-relatedness between its parts.” If one considers the butterfly effect, it can be argued that each part of the organisational environment affects the others in unpredictable ways and while the effect of one unit on the others in a complex system can be identified and isolated using systematic methods (e.g. the effects of a budget cut as a result of the economic downturn on the organisation’s ability to complete projects – meeting the specified timeline, quality and quantity), the effects of one unit on the others in a chaotic situation are difficult to isolate simply because such interactions are random and highly unpredictable (Muthan, 2015:15-16).

The butterfly effect is a feature of M&E because of the multiple levels and multiple sources of the different factors inside and outside organisations and the

fact that organisations are open systems that cannot stop their influence on the external environment and cannot escape from being influenced by factors from within and from outside their boundaries. For example, an economic downturn in South Africa, which is caused by the falling demand for South African commodities by China, the United States of America, or the United Kingdom (to name but a few), will most likely affect the South African government's ability to fund its national, provincial, and local governments and state-owned entities such as Eskom, the South African Broadcasting Corporation (SABC), and South African Airways (SAA), among others. Each one of these organisations' ability to obtain the necessary funding will affect their ability to buy inputs (pay staff/people, material, etc.). Lower salaries might be paid, and staff retrenchment might follow, which could lead to strikes and destruction of property by striking workers. In other cases, lack of or low budget can lead to cutting corners by using poor-quality material and as a result producing poor-quality output, poor outcomes, and negative impacts for the South African people. Clearly, the cause of all this is something that takes place outside the African continent and over which even the South African government has no control. Yet the South African government, the different government institutions, and each person living in South Africa cannot escape the effects because of the globalised open market system in which countries operate. This single factor can have what Schneider and Somers (2006:351) call "the butterfly effect" on the whole South African government system.

A close analysis of Cloete's (2006) argument seems to suggest the existence of two different types of chaos in the environment. There seem to be types of chaos that Cloete (2006:1) calls "deterministic chaos" and "quantum chaotic" or "random chaotic." While "both so-called chaos (deterministic chaos) and quantum (randomly chaotic) are regarded as examples of the functioning of open systems", the two types of chaos differ (Cloete, 2006:1). According to Cloete (2006:2), "quantum chaos" is "un-deterministic" and therefore more difficult to predict than deterministic chaos. For example, as Cloete (2006:2) puts it, a deterministic chaotic situation or phenomenon is less complex and has more order and predictability than a "quantum chaotic situation or phenomena", "which are truly randomly chaotic and are replete with puzzling paradoxes and contra-intuitive characteristics" (Cloete, 2006:2). While Thornhill (2016:47) agrees with Cloete's (2006) argument that quantum chaos is randomly chaotic, he emphasises that quantum chaos only takes place at the quantum or molecular level of the system. Thornhill's (2016:47) location of the quantum chaos at the sub-atomic level

contradicts Cloete's (2006) suggestion that quantum (randomly chaotic) is regarded as an example of the functioning of open systems. Thornhill (2016:48) explains that "the size of an atom as a constituent of a molecule is estimated as one ten millions of a millimetre ($1/10^{-6}$)" and he argues that at quantum level, "the study would involve the anomalous behaviour of particles within an atom" (Thornhill, 2016:48).

The fact that neither Cloete (2006:2) nor Thornhill (2016:47) indicates what constitutes the quantum level of a public or private organisation or whether M&E at the quantum level would produce meaningful and useful results for evaluators suggests that the M&E of government interventions at the quantum level of an organisation might be difficult and might not even be useful for the purpose of this study. However, this in no way suggests that chaos at the quantum level does not impact the whole system and other systems far away, if one considers the butterfly effect discussed above. It is simply agreeing with Auriacombe and Ackron's (2015:15) argument that an attempt to evaluate tiny particles of a bigger and complex (open) system is a futile exercise and will not be able to fulfil the objectives of an evaluation because the evaluation of the whole system (considering the effects of all its components) is not the same or equal to the sum of the multiple micro-level evaluations of the same system.

Hence the evaluation of the whole system is far greater than the sum of the evaluations of its constituent components (Bergoeing, Loayza and Piguillem, 2015:268), because organisations are open systems (Evan, 1993:5) and the interactions among their different parts and the effects on the whole system happen in a chaotic and complex way (Oehmen, Thuesen, Ruiz and Geraldi, 2015:6); the only meaningful and useful M&E of government interventions would pay serious attention to the effects of the different environmental factors within and outside these organisations.

Finally, based on the findings in this paper, the first thing M&E experts and scholars must do in order to conduct valid evaluations of government interventions in a complex and chaotic organisational environment is to accept the fact that change is chaotic and complex and is a permanent part of our lives (Baggio & Sainaghi, 2011:2). According to Cloete (2006:45), if evaluators accept that organisations are complex, dynamic, self-organising systems and are able to view M&E as a social science phenomenon to which chaos and complexity theories apply, then they will be able to improve their abilities to manage and evaluate "change in times of ... chaos and transitions to new orders of being."

Evaluators need to change their mindset and methods of evaluation in order to match the current reality.

5. CONCLUSION

The purpose of this paper was to analyse the factors that influence Monitoring and Evaluation (M&E) of government interventions in a chaotic and complex organisational environment. Its main argument was that the M&E of government interventions takes place within an ever-changing, complex, and often chaotic environment because organisations are open systems. The factors that influence the M&E of government interventions within a chaotic and complex organisational environment presented in this paper are many. Among the many environmental factors that M&E scholars and experts must identify and whose effects they must consider when conducting M&E of government interventions are the direct and indirect effects of the natural environment and man-made (intellectual) environment. These two types of environments exist and operate inside and outside organisations at the same time, and they constantly affect each other and are constantly affected by multiple factors related to local/national and global events (i.e. phenomena) such as social, political, technological, cultural, and legal factors. It has been argued that a complex system contains a large number of autonomous parts, and that these parts are connected to each other and interact with each other in visible and invisible ways. Because of the complex and unpredictable interactions among the different parts of the system, an evaluation of the different parts of a complex system cannot be the same or equal to the evaluation of the whole system.

The combined effects of these multiple environmental factors create a complex and chaotic environment for government interventions, which requires evaluators to possess appropriate evaluation competencies. Because evaluation is a higher-order management function, it is highly ranked on Bloom *et al.*'s (1956) taxonomy which was discussed in this paper.

The chaos and complex environment in which government interventions are evaluated present a golden opportunity for professors and M&E experts at the institutions of higher learning such as universities to urgently start the process of coding M&E professional standards, skills, knowledge, attitudes and cognitive abilities in order to design appropriate M&E training programmes. It also requires people who want a career in M&E to gain appropriate M&E skills and qualifications that correspond with the cognitive levels highlighted in the Bloom's Taxonomy of the Cognitive Domain. Doing so will empower them to deal with

the compounded effects of multiple factors that create the chaotic and complex environment and influence the M&E of government interventions.

Based on the above conclusion, the following need to be explored further:

- The quality and level of M&E training programmes that are currently provided at institutions of higher learning.
- The quality and level of qualifications and cognitive skills of current M&E practitioners.

REFERENCES

- Auriacombe, C.J. and Ackron, J. (2015). PLG 3A Section A: Semester 1 Integrated Development Planning and LED Internal Handbook. Johannesburg: University of Johannesburg.
- Baggio, R. & Sainaghi, R. (2011). Complex and chaotic tourism systems: towards a quantitative approach. *International Journal of Contemporary Hospitality Management*, 1(1), 1-19.
- Basu, A. (2017). What is the Real Meaning of “Butterfly Effect” in 13 Reasons Why? <https://www.quora.com/What-is-the-real-meaning-of-butterfly-effect-in-13-reasons-why>.
- Bergoing, R., Loayza, N. and Piguillem, F. (2015). The whole is greater than the sum of its parts: Complementary reforms to address microeconomic distortions. *The World Bank Economic Review*, 30(2), 268-305.
- Bernhardt, Y. (2018). UJ Internal Handbook (APK & Sow) PMG3A1, PMG3AA3 & PGM3A11: Programme: Public Management and Governance (Third Year). Johannesburg: University of Johannesburg.
- Bhikhoo, A. and Louw-Potgieter, J. (2014). Case: Do managers use evaluation reports? A case study of a process evaluation for a grant-making organisation. In Cloete, F., Rabie, B. and De Coning, C. (Eds.). 2014. *Evaluation Management in South Africa and Africa*. Stellenbosch: Sun Press Imprint.
- Bloom, B., Englehart, M., Furst, E., Hill, W. and Krathwohl, D. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain*. New York and Toronto: Longmans Green.
- Cloete, F. (2006). Chaos and quantum complexity approaches to public management: Insights from the new sciences. *Administratio Publica*, 14(1), 45-83.

- Cloete, F. (2017). Module 2 (HEQF level 9): Policy evaluation theories, models, systems and processes, University of Johannesburg, Johannesburg.
- Cronjé, F. (2014). *A Time Traveller's Guide: Our Next Ten Years*. Cape Town: Tafelberg.
- Evan, W.E. (1993). *Organization Theory: Research and Design*. New York: Macmillan.
- Ho, S.Y. (2003). *Evaluating Urban Policy, Ideology, Conflict and Compromise*. Surrey: Ashgate.
- Huitt, W. (2011). Bloom et al.'s Taxonomy of the Cognitive Domain. <http://www.edpsycinteractive.org/topics/cogsys/bloom.html>.
- Kayuni, H. (2010). Chaos-complexity theory and education policy: Lessons from Malawi's community day secondary schools. *Bulgarian Journal of Science and Education Policy (BJSEP)*, 4(1), 1-31.
- Kusek, J. and Rist, R. (2004). *Ten Steps to a Results-Based Monitoring and Evaluation System*. Washington, D.C.: The World Bank.
- Lomofsky, D. (2016). Theory of Change: A Way of Thinking, a Way of Doing and a Way of Learning. <http://www.samea.org.za/index.php?module=Pagesetter&type=file&func=get&tid=17&fid=file1&pid=37>.
- Morgan, T. and McMahan, C. (2017). Constructivism and Complexity: A Philosophical Basis for Experiential Learning Models in Engineering Design Education? https://www.itas.kit.edu/downloads/veranstaltung_2017_philosophy_of_models_morgan.pdf.
- Muthan, V. public service comM. (2015). *Using Chaos and Complexity Theory to Design Robust Leadership Architecture for South African Technology Businesses*. Master's Thesis. University of the Witwatersrand, Johannesburg.
- Nalubega, T. & Uwizeyimana, D.E.(2019). Public sector monitoring and evaluation in the Fourth Industrial Revolution: Implications for Africa, *Africa's Public Service Delivery and Performance Review* 7(1):1-12, a318. <https://doi.org/10.4102/apsdpr.v7i1.318>.

Oehmen, J., Thuesen, C., Ruiz, P. and Geraldi, J. (2015). Complexity Management for Projects, Programmes, and Portfolios: An Engineering Systems Perspective. http://orbit.dtu.dk/files/108586258/Complexity_Management.pdf.

Organisation for Economic Co-operation and Development (OECD). (2002). Evaluation and Aid Effectiveness: Glossary of Key Terms in Evaluation and Results-Based Management. Paris: OECD.

Owen, J.M. (2006). *Program Evaluation: Forms and Approaches*. (3rd ed.). New York: The Guilford Press.

Oxford English Dictionary. (2018). Definition of 'Normal' in English. <https://en.oxforddictionaries.com/definition/normal>.

Public Service Commission. (2008). Basic Concepts in Monitoring and Evaluation. <http://www.psc.gov.za/documents/docs/guidelines/PSC%206%20in%20one.pdf>.

Rabie, B. & Cloete, F. (2009). A new typology of monitoring and evaluation approaches. *Administratio Publica*, 17(3), 76-97.

Rabie, B. and Goldman, I. (2014). The context of evaluation management. In Cloete, F., Rabie, B. and De Coning, C (Eds.). *Evaluation Management in South Africa and Africa*. Stellenbosch: Sun Press.

Rickles, D., Hawe, P. and Shiell, A. (2007). A simple guide to chaos and complexity. *Journal of Epidemiology and Community Health*, 61(11), 933-937.

Rossi, P.H., Lipsey, M.W. and Freeman, H.E. (2004). *Evaluation: A Systematic Approach*. (7th ed.). London: Sage Publications.

Salandy, A. (2018). Building Blocks for a Useful Programme Monitoring and Evaluation System. <https://www.uniteforsight.org/conference/ppt-2018/Anthony%20Salandy.pdf>.

Saunders, R. (2015). *Implementation Monitoring and Process Evaluation*. Singapore: Sage Publications.

Schneider, M. and Somers, M. (2006). Organizations as complex adaptive systems: Implications of complexity theory for leadership research. *The Leadership Quarterly*, 17(1), 351-365.

Scriven, M. (2003). Michael Scriven on the Difference Between Evaluation and Social Science Research. <https://sparkaction.org/content/michael-scriven-differences-between-evaluation-and-social-science-research>.

Thornhill, C. (2016). Quantum physics, cosmology and public administration: Compatibility in theory construction? *Administratio Publica*, 24(1), 45-58.

University of Kansas and UARK.EDU. (n.d.). Using Bloom's Taxonomy to Write Effective Learning Objectives. <https://tips.uark.edu/using-blooms-taxonomy/>.

Uwizeyimana, D.E. (2018). Progress made towards achieving Rwanda's Vision 2020: Key indicators' targets. *International Journal of Management Practice*, 12(1), 4-46.

Uwizeyimana, DE. (2019). The logframe as a monitoring and evaluation tool for government interventions in a chaotic and complex government interventions' environment. *Africa's Public Service Delivery and Performance Review* (forthcoming issue).

Woodrow, P. and Oatley, N. (2013). Change in Conflict, Security & Justice Programmes: Part I: What They Are, Different Types, How to Develop and Use Them. London: Department of International Development, UK Aid from the British People.

EFFECTS OF GENDER ON ANTECEDENTS TO SOCIAL ENTREPRENEURSHIP AMONG UNIVERSITY STUDENTS IN SOUTH AFRICA

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–Abstract–

Social inequality is on the rise globally despite the efforts that developing economies are making to reduce the gap. Social entrepreneurship (SE) has become a fashionable construct known for its mission to address the social exclusion of persons in vulnerable situations. The debate on SE has reached various institutions and research networks around the world. Scientific research in the field is growing, as is evident from the proliferation of publications on the topic. However, empirical investigations on the antecedents to social entrepreneurial intentions in South Africa are still rare. This study aimed at investigating the influence of gender on antecedents to social entrepreneurial intentions among university students and professionals in South Africa and Germany. A questionnaire was administered to 703 students from a selection of universities in South Africa and Germany. ANOVA was applied to examine the differences regarding the influence of gender on social and commercial entrepreneurial intentions. Significant differences were found regarding gender and both types of entrepreneurial intentions in a way that social entrepreneurial intention levels were higher among women, and

commercial entrepreneurial intention levels were higher among men in both samples. It may therefore be concluded that entrepreneurship is still a rather gendered career in a way that attributes linked to commercial entrepreneurship are usually stereotypically male, whereas attributes linked to social entrepreneurship are usually stereotypically female. Furthermore, given the predominantly moderate to high effect sizes of gender, it is argued that the effect of gender in the entrepreneurial intention formation process is too substantial to be limited to a control variable.

Key Words: Social entrepreneurship, social entrepreneurial intentions, gender

JEL Classification: M00

1. INTRODUCTION

Social inequality is on the rise globally despite the efforts that economies are making to reduce the gap (Mackebach, 2017). Social entrepreneurship (SE) has become a fashionable construct known for its mission to address the social exclusion of persons in vulnerable situations (Terziev, 2016). Not only is a business-like discipline that combines social mission, innovation and determination well suited for the current times (Dees, 1998), SE has become an important social/economic spectacle for both developed and developing countries (Dacin, Dacin & Matear, 2010). The need for SE research in South Africa cannot be overemphasised. South Africa has been unable to address the triple challenges of poverty, unemployment and inequality (Karanda & Toledano, 2012). Considering unemployment alone, the figures are constantly on the rise, irrespective of the measures adopted. For example, the 2019 Quarterly Labour Force Survey by the National Treasury reported a national unemployment level that stagnated at 27.6 percent. Similar trends prior to 2011 show unemployment levels of thirty percent (30%) among youths between 15 and 24 years, and forty percent (40%) among youths between 25 and 34 years (Fatoki & Chindoga, 2011). Many of these unemployed youths express their anger and frustrations by either committing crime or indulging in substance abuse, which further exacerbates the many social ills plaguing the country (Viviers, Venter & Solomon, 2012). Therefore, encouraging the study of social entrepreneurship among university students in South Africa could serve as a catalyst for the many social ills plaguing the country (Viviers *et al.*, 2012).

Although the debate around SE has expanded to various institutions and research networks around the world (Defourny & Nyssens, 2010), it is only in the recent past that scientific research in the field has mushroomed (Kraus *et al.*, 2014). However, a number of recent reviews highlight that SE research has a substantial lack of quantitative research despite the exponential growth of published papers in

the field (Sassmannshausen & Volkmann, 2018). Largely, SE research has mainly focused on a conceptual understanding of the phenomenon (e.g. Bacq & Janssen, 2011; Mair & Noboa, 2006) with minimal empirical investigation (Short *et al.*, 2009). Accordingly, there is little empirical evidence to substantiate the factors that influence social entrepreneurial intentions among university students in South Africa. Most surveyed work on social entrepreneurship has been conducted in the United States (US) and the United Kingdom (UK) (Short *et al.*, 2009; Mair & Naboa, 2006) with little to no attention received in developing countries such as South Africa (Viviers *et al.*, 2012; Urban, 2008). Such failures demonstrate that there are research gaps that need to be addressed in the study of SE. Consequently, the focus of this study is on delineating the factors that influence SE intentions through a thorough focused literature review and identifying the gender effect on the identified factors. Demographic variables such as gender, age, level of education and ethnic group have often been included as control variables within prior research, and only a few studies have explored their direct effect in determining entrepreneurial intentions (e.g. Wilson, Kickul & Marlino, 2007). Therefore, taking the foregoing into account, this study empirically investigates the influence of gender on the antecedents to social entrepreneurial intentions using a sample of South African and German university students ($N_{\text{total}} = 703$).

2. THEORETICAL FRAMEWORK

Like entrepreneurship, the study of SE is riddled with definitional ambiguities. Competing definitions and conceptual frameworks that exist (Cukier *et al.*, 2011; Mair & Marti, 2006) challenge advanced research of SE as a legitimate field of study (Nicholls, 2010; Saebi, Foss & Linder, 2019). However, scholars in the field have become more interested in the theoretical development of the intentions towards the formation of SE (Mair & Noboa, 2006). SE intentions may refer to the motivation to identify opportunities to create social impact. Founding a social enterprise is usually considered the result of translating SE intentions into action (Hockerts & Wüstenhagen, 2010). To a certain degree, the resulting action of forming a social enterprise mitigates the previously mentioned SE definition issues, even though the perception of what a social enterprise is remains vague (Hockerts, 2017).

2.1. Entrepreneurial intentions

Intention theory is founded on cognitive psychology and is described as the glue that links beliefs and attitudes to subsequent behaviour (Ajzen & Fishbein, 1977). When applied to entrepreneurship, intentionality as a psychological thought

process directs one's attitude towards a way of thinking that emphasises opportunities over threats (Krueger *et al.*, 2000). This application of the intentional theory to the field of entrepreneurship has yielded fruitful avenues for broadening entrepreneurship research (Boyd & Vozikis, 1994; Krueger & Brazeal, 1994; Ajzen, 1991). For example, Bird (1988) contends that entrepreneurs' ideas and intentions form part of the initial strategic template that guides goal setting, communication, commitment, and organisation in the process of new business development. Accordingly, Bird (1988) proposes a model that argues for situational and cognitive factors such as politics, economical context, personality, and ability to act as antecedents that trigger entrepreneurial intentions. In another study, Boyd and Vozikis (1994) further developed Bird's model and suggested individual self-efficacy as an intentional trigger that guides a person's belief in his/her capability to perform an entrepreneurial task. As discussions of entrepreneurial intentions evolved, numerous models were developed. Of particular interest is Ajzen's (1991) theory of planned behaviour (TPB). The conceptual model was developed suggesting that intentions to engage in a particular behaviour result from three independent antecedents, namely attitudes towards behaviour, subjective norms and perceived behavioural control. In other words, intentions towards behaviour are determined by the perceptions of the personal desirability of performing a particular behaviour based on intrinsic and extrinsic personal outcomes (attitude towards behaviour); the extra-personal influences on the decision-maker (subjective norm); and the personal perception of the feasibility of behaviour (perceived behavioural control) (Ajzen, 1991). Accordingly, the stronger the intention to engage in particular behaviour is, the more likely it would be that the behaviour would manifest.

2.2. Social entrepreneurial intention

In a recent meta-analysis study, Kruse, Wach and Wegge (2018) highlight the model of SE intention prediction as the main theoretical approach used to determine antecedents to SE intentions. The social entrepreneurial intentions model was first developed by Mair and Noboa (2006) to explain how social entrepreneurial intentions get formed. While gaining insights from existing entrepreneurial intentions theories, Mair and Noboa (2006) suggest that intentions to start a social business develop from perceptions of perceived desirability and perceived feasibility. More specifically, Mair and Noboa (2006) opine that perceptions of desirability or the motives to establish a social business are triggered by the presence of empathy and moral judgement. On the other hand, perceived feasibility or the probability that a social business will manifest depends on an individual's self-efficacy and moral judgement. Besides recognising a set of

dynamic variables to explain behavioural intentions, Mair and Noboa (2006) arrived at a conclusion that their study was merely speculative and that additional conceptual and empirical work is needed to substantiate the claims.

Recently, research on intentions formation became an empirical driver of quantitative research in the field of SE. So far, a number of empirical studies have investigated factors influencing social entrepreneurial intentions (Hockerts, 2017; Tiwari, Bhat & Tikoria, 2017), with some addressing the recommendations made by Short et al. (2009) and applied established theories (Dacin *et al.*, 2010) such as the theory of planned behaviour (Ajzen 1991). For example, in a study that aimed at developing and validating a scale to measure antecedents of SE intention, Hockerts (2017) found that SE intentions antecedents are measured according to empathy, moral obligation, self-efficacy and social support. In another study, Urban and Teise (2015) proposed several key variables that are important antecedents to social entrepreneurial intentions. While building on Mair and Noboa's model, Urban and Teise (2015:37) analysed the influence of independence, achievement, self-efficacy, empathy and moral judgement, vision, social support and innovativeness on SE intentions. Among the factors that were tested, achievement, moral judgement and empathy, and self-efficacy revealed the greatest amount of variance in explaining social entrepreneurial intentions. However, existing research hardly pays attention to investigating the role of social demographic factors in determining SE intentions.

2.3. Gender and social entrepreneurial intentions

The influence of personal attributes on entrepreneurial activity is well documented in the literature. Scholars who argue that social demographic factors matter in determining entrepreneurial aspiration have focused on understanding the role of factors such as gender, age, level of education and income (Chipeta, Surujlal & Koloba, 2016; Sailus; 2015; Sánchez Cañizares & Fuentes García, 2010). For example, in a study that investigated gender differences in entrepreneurial attitudes, Sánchez and Fuentes (2010) found that women are less prone to initiate entrepreneurial activity and that fear of failure is a major obstacle to starting a business. In another study that aimed at investigating the elements that play the most influential role in determining entrepreneurial behaviour among the youth in MENA countries, Setti (2017) found a positive influence of gender, education, occupation and income on entrepreneurial intentions. Similarly, Sailus (2015) found that males were predominantly involved in economic activities and public life, while females were restricted to taking care of the household activities. This prevented them from being part of the economic involvement or participating as

economic equals in many countries (Jayachandran, 2014). Despite the constraints they experienced, females slowly began contributing to the economy by embarking on entrepreneurial ventures. Such findings highlight the significance of understanding the influence of demographic variables on entrepreneurial intentions.

3. RESEARCH METHODOLOGY

3.1. Sampling and data collection

The target population of the study comprised all university students in South Africa. A non-probability convenience sampling technique was employed. The sample size of $N_{total} = 703$ ($N_{South\ Africa} = 514$; $N_{Germany} = 189$) was determined based on historical methods where a justification of a particular sample size is used in previous studies (Hockerts, 2017; Tiwari et al., 2017; Nga & Shamuganathan, 2010), the sample size can be considered suitable for this study's purpose.

3.2. Measuring instrument and data collection

A questionnaire was developed to investigate antecedents to social entrepreneurial intentions. Section A requested of participants to provide demographic data. Section B comprised items relating to antecedents of social entrepreneurial intentions. Factors that were used to measure antecedents to social entrepreneurial intentions include a social entrepreneurial intentions scale that was developed by Kruse, Chipeta, Surujlal and Wegge (2019), and a commercial entrepreneurial intentions scale adapted from a commonly used commercial entrepreneurial intentions scale, the entrepreneurial intention questionnaire (EIQ) by Liñán and Chen (2009). The items such as, "*I will make every effort to start and run my own commercial enterprise*" were measured on a seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). A pilot study was conducted among 95 students from a university in South Africa to determine internal consistency of the measuring instrument. The data for the main survey was collected from students at selected universities in South Africa. Furthermore, a sample with a higher occupational diversity was drawn in Germany. The questionnaire was administered face to face by the authors.

3.3. Reliability and validity

Cronbach's alpha was used to determine internal consistency of the questionnaire. According to Malhotra (2010), values below 0.6 indicate unsatisfactory internal consistency and values above 0.6 indicate satisfactory internal consistency. The

questionnaire used to measure antecedents to social entrepreneurial intentions was reliable with an overall Cronbach's alpha value $\alpha_{\text{Pilot}} = .74$, which demonstrated satisfactory reliability of the questionnaire.

3.4. Data analysis

Using the statistics software IBM SPSS 25, descriptive statistics and correlations were calculated to provide a first overview of the data. Furthermore, analyses of variance (ANOVAs) were used to check the hypotheses separately for commercial and social entrepreneurial intention and the South African and the German sample.

3.5. Ethical considerations

The study was in line with the ethical guidelines of North-West University. Participation in the survey was voluntary. Confidentiality and anonymity of the information provided by the respondents were strictly safeguarded

4. RESULTS

4.1. Demographic profile of the samples

Demographic data for the study was collected from university students from South Africa. A total number of 514 university students from South Africa participated in the survey. 280 (54.5%) were female and 234 (45.53%) were male. Their age distribution ranged between 17 and 35 years. The majority of the participants were between the ages of 18 and 23 years. In terms of occupation, 514 (100%) of the participants were students. Particularly, 462 (89.9%) were undergraduate students, 39 (7.6%) were studying towards an honours degree, 7 (1.4%) were pursuing a master's degree, and 5 (0.2%) were PhD students. Regarding the German sample, a total of 189 subjects participated in the study. A total of 73.16% (138) participants were female. The mean age of the participants was 28.00 years (SD 11.67 years) and the majority of them were studying (67.37%). The rest comprised employed people (23.68%) and people with other occupations or unemployed people (8.95%).

4.2. Correlation analysis

A correlation analysis was conducted to check for discriminant validity of the scales measuring social entrepreneurial intention and commercial entrepreneurial intentions. The correlation coefficient between the two measurement scales was $r = .01$, an indication of a low to almost no correlation (Cohen, 1988). These results also indicate that these two factors are independent factors.

4.3. Analysis of variance: Gender and social entrepreneurial intentions

An ANOVA test was employed to examine gender difference regarding social entrepreneurial intentions. With the total sample size of $n = 514$ in South Africa and $n = 189$ in Germany, two Levene tests of homogeneity of variance were conducted. The Levene tests yielded no indication of heterogeneity of variances in the South African sample. However, in the German sample, variance heterogeneity was detected for commercial entrepreneurial intention. Consequently, for further analyses, we applied a basic ANOVA for the South African sample and for the SE intention investigation in the German sample, but a more robust Welch-ANOVA was applied to investigate gender differences on commercial entrepreneurial intention among the German sample. The ANOVA results are shown in Tables 1 to 4.

Table 1: ANOVA on gender and SE intentions for the South African sample

	Sum of squares	df.	Mean square	F	Sig.
Between groups	469.876	1	469.876	9.110	.003
Within groups	26408.492	512	51.579		
Total	26878.368	513			

Table 1 shows ANOVA results indicating significant gender differences on social entrepreneurial intentions for the South African sample. The test revealed that the means between the groups are significantly different. Considering the group means of SE intention among the male ($M = 5.12$; $SD = 1.21$) and the female participants ($M = 5.44$; $SD = 1.18$), these results imply that women have significantly higher SE intentions compared to men in the sample of South African university students. The effect size of this mean difference (partial $\eta^2 = .02$) can be labelled as small to moderate (Cohen, 1988).

Table 2: ANOVA on gender and SE intentions for the German sample

	Sum of squares	df	Mean square	F	Sig.
Between groups	43,884	1	43,884	17,245	,000
Within groups	475,869	187	2,545		
Total	519,752	188			

As displayed in Table 2, there is also a significant gender difference regarding SE intention in the German sample. Given the smaller means among the male ($M = 3.21$; $SD = 1.66$) compared to the female sample ($M = 4.31$; $SD = 1.57$), women have a significantly higher level of SE intention compared to men in the German

sample. The effect size (partial $\eta^2 = .08$) indicates a moderate effect (Cohen, 1988).

4.4. Analysis of variance: Gender and commercial entrepreneurial intentions

Table 3: ANOVA on gender and CE intentions for the South African sample

	Sum of squares	df	Mean square	F	Sig.
Between groups	91.138	1	91.138	31.296	.000
Within groups	1490.989	512	2.912		
Total	1582.127	513			

As illustrated in Table 3, statistically significant differences were found regarding gender on CE intentions among university students in South Africa. There were significant mean differences comparing male ($M = 4.85$; $SD = 1.61$) and female participants ($M = 4.00$; $SD = 1.79$). Therefore, men were found to have significantly higher CE intentions compared to women. The effect size (partial $\eta^2 = .06$) can be labelled as moderate (Cohen, 1988).

Table 4: Welch-ANOVA on gender and CE intentions for the German sample

	Welch's F	df ₁	df ₂	Sig.
Welch-ANOVA	17.479	1	61,667	.000

Table 4 shows the results of the Welch-ANOVA when investigating gender differences regarding CE intention levels among males and females in the German sample. Considering the significant difference and the mean SE intention level among males ($M = 3.02$; $SD = 1.90$) and females ($M = 1.83$; $SD = 1.12$), men have significantly higher CE intention levels compared to women in the German sample. The effect size (partial $\eta^2 = .13$) can be labelled as moderate to high (Cohen, 1988).

5. DISCUSSION

This study investigated the effect of gender on social and commercial entrepreneurial intention levels using a samples drawn from a selection of South African universities and different occupational groups in Germany. Significant gender differences were found for social entrepreneurial intentions and commercial entrepreneurial intentions. On a general basis, this finding is in line with both recent qualitative and quantitative research and large-scale surveys on career preferences and entrepreneurial levels worldwide, such as the Global

Entrepreneurship Monitor (GEM). Following the reasoning of Bruni, Gherardi and Poggio (2004), entrepreneurship has long been considered and still is rather a gendered career path. They argue that due to the image of an entrepreneur as “the conqueror of unexplored territories, the lonely hero, the patriarch” (p. 407), there is a male bias concerning the career choice of becoming an entrepreneur. They opine that despite new scientific developments such as research on female entrepreneurship, these developments only contribute to “a process of “othering” the non-male” (p. 407). These views received support in two recent studies by Hechavarría and Ingram (2016) and Gupta, Wieland and Turban (2019). However, both studies are not only of note due to their high sample sizes based on GEM data (Hechavarría & Ingram, 2016) and their sophisticated experimental and methodological design (Gupta *et al.*, 2019), they have also contrasted commercial and social ventures regarding gender from two different perspectives. The former study focused on the perspective of female entrepreneurs themselves and found that women are more likely to found social compared to commercial enterprises. The latter study could show that in line with the social role theory (Eagly, 1987), social entrepreneurship is more associated with female than male entrepreneurs due to the social and caring element in social entrepreneurship, which is stereotypically female (Hechavarría *et al.*, 2012). To elaborate further concerning the current investigation in this paper, additional evidence was found for a gender gap regarding social and commercial entrepreneurial intentions. Regardless of the cultural background of the participants, it was revealed that social entrepreneurial intentions were higher for females compared to males and that commercial entrepreneurial intentions were higher for males compared to females. This study also offers additional evidence for a culturally independent gender gap considering that the apparent cultural differences between South Africa and Germany (Gupta, Hanges, & Dorfman, 2002) have not impacted the gap. This supports the assumption that personal values rather than an individual’s cultural background explain gender differences in entrepreneurial career intentions (Hechavarría & Ingram, 2016) even though one should not neglect the interrelation of culture and values as there is large consensus that the former has an effect on the latter (Diefendorff & Chandler, 2011).

6. IMPLICATIONS FOR RESEARCH AND PRACTICE

The current study has several implications for researchers and practitioners. Firstly, it has been shown that there are gender differences concerning male and female entrepreneurial intentions, which provide support for the assumption of entrepreneurship being a gendered career path. However, in contrast to earlier research linking entrepreneurial behaviour almost exclusively to stereotypically

male characteristics, the findings of this study highlight the need to differentiate between different forms of entrepreneurship regarding gender preferences, as social entrepreneurship and its social aspects seem to attract women more than men. Consequently, it is argued that future research should focus more on the role of gender in entrepreneurial intention formation, as there is increasing evidence that the impact of gender is more substantial than previously regarded as merely a control variable.

Secondly, adding to previous research showing a female preference for social entrepreneurship and a male preference for commercial entrepreneurship, this study shows that these preferences are, at least considering the two countries investigated, culturally invariant. In order to further consolidate this assumption, (i) gender needs to be investigated in more detail when conducting intercultural studies (see the first implication above); and (ii) there is a need to extend the cultural scope of scientific investigations particularly to countries with different levels of entrepreneurial activity.

Thirdly, practitioners can particularly benefit from these findings. Generally, past research highlights the assumption that entrepreneurship as a career lacks attractiveness for many females. Therefore, by focussing more on new forms of entrepreneurship linking the aspiration to generate income with a second mission, e.g. the generation of social value as in social entrepreneurship, a largely untapped potential of entrepreneurial activity can be uncovered. Considering that, particularly in developing and emerging countries where economic growth *and* social justice are necessary for further development, empowering women to pursue social entrepreneurial careers can serve as a means to (i) reduce the high poverty and unemployment levels particularly among youths; and (ii) better the perspectives of young graduates intending to make a living and help people in their surroundings. Therefore, we encourage policymakers to focus more on ‘tailor-made’ programmes to boost entrepreneurial activity going beyond a sole investment in traditional activity; therefore, commercial entrepreneurial activity that is less attractive for many females intending to pursue a career as a social entrepreneur.

7. LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

The findings of this study should be viewed in light of limitations. The study was limited to a sample frame that consisted of university students from South Africa and Germany that were acquired through convenience sampling. The total sample size of 703 participants is consistent with previous studies in the field of SE. However, generalisation of the findings to a greater population should be

approached with caution. Future studies in the subject area are recommended to use bigger and particularly representative samples and to include institutions beyond South Africa and Germany. Future research could also focus on exploring the relationship between social and commercial entrepreneurship intentions and other variables such as entrepreneurial bias, cultural dimensions and work values that would contribute to a better understanding of the underpinnings of the persisting gender differences in entrepreneurship and entrepreneurial intention formation.

8. CONCLUSION

While investigating the gender difference regarding commercial and social entrepreneurial intentions in South Africa and Germany, the results of this study provide evidence that gender does influence one's intentions to engage in entrepreneurial ventures. In particular, females were found to have stronger intentions to engage in social entrepreneurial ventures than their male counterparts. The results also indicate a culturally invariant preference of entrepreneurial behaviour in the samples used. It was found that males preferred commercial entrepreneurship to social entrepreneurship, and *vice versa*, in relation to female preference. This is in line with previous research claiming that entrepreneurship is still a rather gendered career in a way that attributes linked to commercial entrepreneurship are usually stereotypically male, whereas attributes linked to social entrepreneurship are usually stereotypically female. Furthermore, given the predominantly moderate to high effect sizes of gender, it is argued that the effect of gender in the entrepreneurial intention formation process is too substantial to be limited to a control variable. As a result, and to consolidate our findings, future research is encouraged to extend the cultural scope of our work particularly to countries with different levels of entrepreneurship. Given the apparent gender differences regarding different entrepreneurial career paths, policymakers should pay more attention to a tailor-made support of entrepreneurial programmes and particularly focus on empowering women with social entrepreneurial intentions in order to increase entrepreneurial activity on the one hand and contribute to more social justice on the other hand.

REFERENCES

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179–211.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), 888-918.

- Bacq, S. & Janssen, F. (2011). The multiple faces of social entrepreneurship: a review of definitional issues based on geographical and thematic criteria. *Entrepreneurship & Regional Development*, 23(5&6), 373–403.
- Bird, B. (1988). Implementing entrepreneurial ideas: the case for intention. *Academy of Management Review*, 13(3), 442–453.
- Boyd, N.G. & Vozikis, G.S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18(4), 63–77.
- Bruni, A., Gherardi, S., & Poggio, B. (2004). Doing gender, doing entrepreneurship: An ethnographic account of intertwined practices. *Gender, Work & Organization*, 11(4):406-429.
- Chipeta, E. M., Surujlal, J., & Koloba, H. A. (2016). Influence of gender and age on social entrepreneurship intentions among university students in Gauteng province, South Africa. *Gender and Behaviour*, 14(1), 6885-6899.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioural Sciences*. Hoboken: Taylor and Francis
- Cukier, W., Trenholm, S., Carl, D. & Gekas, G. (2011). Social entrepreneurship: a content analysis. *Journal of Strategic Innovation and Sustainability*, 7(1), 99–119
- Dacin, P. A., Dacin, M. T. & Matear, M. (2010). Social entrepreneurship: why we don't need a new theory and how we move forward from here. *The Academy of Management Perspectives*, 24(3), 37–57.
- Dees, J.G. 1998. The meaning of social entrepreneurship. <http://www.redalmarza.cl/ing/pdf/TheMeaningofsocialEntrepreneurship.pdf>. Date of access: 17th June 2019.
- Defourny, J. & Nyssens, M. (2010). Conceptions of social enterprise and social entrepreneurship in Europe and the United States: Convergences and divergences. *Journal of Social Entrepreneurship*, 1(1), 32-53.
- Diefendorff, J. M., & Chandler, M. M. (2011). Motivating employees. In S. Zedeck, H. Aguinis, W. F. Cascio, M. J. Gelfand, K. Leung, S. K. Parker, & J. Zhou (Eds.), *APA Handbook of Industrial and Organizational Psychology: Maintaining, Expanding, and Contracting the Organization* (pp. 65-135). Washington, DC: APA
- Eagly, A. H. (1987). *Sex Differences in Social Behavior: A Social-Role Interpretation*. Hillsdale, NJ: Erlbaum
- Fatoki, O.O. & Chindoga, L. (2011). An investigation into the obstacles to youth entrepreneurship in South Africa. *International Business Research*, 4(2), 161-169.

Gupta, V., Hanges, P. J., & Dorfman, P. (2002). Cultural clusters: Methodology and findings. *Journal of World Business*, 37(1), 11-15. doi:[http://dx.doi.org/10.1016/S1090-9516\(01\)00070-0](http://dx.doi.org/10.1016/S1090-9516(01)00070-0)

Gupta, V. K., Wieland, A. M., & Turban, D. B. (2019). Gender Characterizations in Entrepreneurship: A Multi-Level Investigation of Sex-Role Stereotypes about High-Growth, Commercial, and Social Entrepreneurs. *Journal of Small Business Management*, 57(1):131-153.

Hechavarría, D. M., Ingram, A., Justo, R., & Terjesen, S. (2012). Are Women More Likely to Pursue Social and Environmental Entrepreneurship? (In K. D. Hughes & J. E. Jennings (Eds.), *Global Women's Entrepreneurship Research: Diverse Settings, Questions and Approaches*. (pp. 135-151). Northampton, MA: Edward Elgar.

Hechavarría, D. M., & Ingram, A. E. (2016). The entrepreneurial gender divide: Hegemonic masculinity, emphasized femininity and organizational forms. *International Journal of Gender and Entrepreneurship*, 8(3), 242-281

Hockerts, K. (2017). Determinants of social entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 41(1), 105–130.

Hockerts, K. & Wüstenhagen, R. (2010). Greening Goliaths versus emerging Davids— theorizing about the role of incumbents and new entrants in sustainable entrepreneurship. *Journal of Business Venturing*, 25(5), 481–492

Jayachandran, S. (2014). The roots of gender inequality in developing countries. <https://www.nber.org/papers/w20380>. Date of access: 11th June 2019

Karanda, C. & Toledano, N. (2012). Social entrepreneurship in South Africa: a different narrative for a different context. *Social Enterprise Journal*, 8(3), 201-215.

Kraus, S., Filser, M., O'Dwyer, M. & Shaw, E. (2014). Social entrepreneurship: an exploratory citation analysis. *Review of Managerial Science*, 8(2):275–292.

Krueger, N.F. & Brazeal, D.V. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship: Theory & Practice*, 18(3), 91–104.

Krueger, N.F., Reilly, M.D. & Carsrud, A.L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5), 411–432.

Kruse, P. Chipeta, E. M. Surujlal, J. Wegge, J (2019). Measuring good intentions - Development and validation of a new social entrepreneurial intention scale. (Manuscript submitted for publication).

Kruse, P., Wach, D. & Wegge, J. (2018). What motivates social entrepreneurs? — A meta-analysis on predictors of social entrepreneurial intention. (Manuscript submitted for publication).

- Liñán, F. & Chen, Y.W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593–617.
- Mackenbach, J.P. (2017). Persistence of social inequalities in modern welfare states: Explanation of a paradox. *Scandinavian Journal of Public Health*, 45(2), 113-120.
- Mair, J. & Marti, I. (2006). Social entrepreneurship research: a source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 1–21.
- Mair, J. & Noboa, E. (2006). Social entrepreneurship: How intentions to create a social venture are formed. (In Mair, J. Robinson J. & Hockerts K. eds. *Social entrepreneurship*. Basingstoke: Palgrave-Macmillan. p. 121-135).
- Malhotra, N.K. (2010). *Marketing Research: An Applied Orientation*. New Jersey: Pearson
- Nga, J.K.H. & Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start up intentions. *Journal of Business Ethics*, 95(2), 259-282.
- Nicholls, A. (2010). The legitimacy of social entrepreneurship: reflexive isomorphism in a pre-paradigmatic field. *Entrepreneurship Theory and Practice*, 34(4), 611–633.
- Raposo, M. do Paco, A. & Ferreira, J. (2008). Entrepreneur's Profile: A Taxonomy of Attributes and Motivations of University Students. *Journal of Small Business and Enterprise Development*, 15(2), 405-418.
- Saebi, T., Foss, N. J., & Linder, S. (2019). Social entrepreneurship research: Past achievements and future promises. *Journal of Management*, 45(1), 70-95.
- Sailus, C. (2015). Feminism in the 19th century: Female's rights, roles, and limits. <http://study.com/academy/lesson/feminism-in-the-19th-century-females-rights-roles-and-limits.html>. Date of access: 11th June 2019.
- Sánchez Cañizares, S., & Fuentes García, F. (2010). Gender Differences in Entrepreneurial Attitudes. *Equality, Diversity and Inclusion: An International Journal*, 29(8), 766-786.
- Sassmannshausen, S. P., & Volkmann, C. (2018). The scientometrics of social entrepreneurship and its establishment as an academic field. *Journal of Small Business Management*, 56(2), 251-273.
- Setti, Z. (2017). Entrepreneurial intentions among youth in MENA countries: Effects of gender, education, occupation and income. *International Journal of Entrepreneurship and Small Business*, 30(3), 308-324.

Short, J.C., Moss, T.W. & Lumpkin, G.T. (2009). Research in social entrepreneurship: past contributions and future opportunities. *Strategic Entrepreneurship Journal*, 3(2),161–194.

Terziev, V. (2016). Entrepreneurship in organic production—an incentive for sustainable rural development. *Agricultural and Resource Economics: International Scientific E-Journal*, 2(4), 1-13.

Tiwari, P., Bhat, A.K. & Tikoria, J. (2017) An empirical analysis of the factors affecting social entrepreneurial intentions. *Journal of Global Entrepreneurship Research*, 7(1), 9. doi:10.1186/s40497-017-0067-1

Urban, B. (2008). Social entrepreneurship in South Africa: delineating the construct with associated skills. *International Journal of Entrepreneurial Behaviour & Research*, 14(5), 346–364.

Urban, B. & Teise, H. (2015). Antecedents to social entrepreneurship intentions: an empirical study in South Africa. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, 24(2), 36–52

Viviers, S., Venter, C., & Solomon, G. (2012). South African university student's intentions to establish social enterprises. <https://scholar.sun.ac.za/handle/10019.1/81935>. Date of Access: 17th June 2019.

Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 30(1), 387–406.

PURCHASE INTENTION TOWARDS ENVIRONMENTALLY FRIENDLY PRODUCTS AMONG CONSUMERS IN SOUTH AFRICA. APPLYING THE THEORY OF PLANNED BEHAVIOUR

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–Abstract–

The effects of global warming and the changing climatic conditions have increased the need for environmentally friendly products. South Africa, as a developing nation, has not developed sufficient infrastructure for sustainable behaviour and for this reason its consumers have little exposure to sustainability practices compared to the developed countries. The purpose of this study was to investigate the purchase intention of South African consumers towards environmentally friendly products using the Theory of Planned Behaviour. A self-administered questionnaire was distributed among South African consumers and a total of 200 questionnaires were deemed legible (Comment to author: do you mean valid ?) for analysis. Factor analysis was used to identify the factors that influence purchase intention of environmentally friendly products. Correlation analysis was used to establish the relationship among variables. Regression analysis was used to investigate the predictive influence of independent variables on the dependent variable. A statistically significant correlation between the factors that influence purchase intention of environmentally friendly products and purchase intention was found. Regression analysis indicated that attitudes and subjective norms had an insignificant influence on the purchase intention of environmentally friendly products. Conversely, perceived behavioural control, environmental concern and environmental knowledge contributed significantly towards the intention to purchase environmentally friendly products. Tangible action is required to encourage everyone to know and understand the significance of purchasing environmentally friendly products.

Key Words: Purchase intention, environmentally friendly products, South Africa, consumers, theory of planned behaviour,

JEL Classification: M39

1. INTRODUCTION

The effects of global warming and the changing climatic conditions have increased the need for environmentally friendly products. In view of this phenomenon of global warming, it would be in the best interests of everyone that future purchasing decisions of consumers should be based on the consideration of the environment (Ali & Ahmad, 2012). This shift in purchasing decision is demonstrated by a growing awareness regarding the sustainability of the environment where businesses and consumers are searching for alternative methods to mitigate the impact of global warming on natural resources (de Medeiros, Ribeiro & Cortimiglia, 2014). One way of doing this is for the 21st century consumer to choose environmentally friendly products instead of the more traditional ones (Haws, Winterich & Naylor, 2014). This type of consumer, known as ‘green consumers’, would avoid products that could harm people and the environment. It came as no surprise that recently the focus shifted to green marketing and many industries such as food, energy, construction and automobile manufacturing, among many, started developing environmentally friendly products (Goh & Balaji, 2016). However, it is prudent to note that consumers’ decision-making regarding the purchase of environmentally friendly products depends to a large extent on accurate and detailed labelling (Harmann & Apaolaza-Ibáñez, 2012). According to Cheah and Phao (2011), one method of improving green marketing communication is through sponsorships.

Anvar and Venter (2014) posited that green marketing came into effect due to the degradation of the environment which was caused by the abundance of natural resources. Accordingly, a growing number of consumers are becoming conscious of the problems resulting from environmental degradation and, therefore, purchase environmentally friendly products (Leonidou, Leonidou & Kvasona, 2010). Environmentally friendly products are products that “have little or no negative impact on the environment” (Haws et al., 2014). Some consumers are even prepared to pay a premium price for environmentally friendly products due to their concern for the natural environment (Harmann & Apaolaza-Ibáñez, 2012). This assertion is supported by the 2008 Eurobarometer which showed that up to 75% of European consumers indicated their readiness to purchase these products even if they would have to pay more (Brécard et al., 2009). <<On first mention, all the author names should be given >>

Sadly, a myriad of barriers exist between consumers and environmentally friendly products, which may cause the promotion of these products difficult to realise (Shao, Taish & Ortega-Mier, 2016). Nevertheless, the overwhelming view is that businesses and consumers alike should embark on different means to protect and preserve the Earth's natural resources and the environment (Gan, Wee, Ozanne & Kao, 2008). Some companies heeded the call and shifted their focus towards the implementation of environmentally friendly supply, production and distribution (Cambra-Fierro, Hart & Polo-Redondo, 2008).

2. LITERATURE REVIEW

The principle of sustainable development has the potential to help companies to achieve the highest quality of products and services (Banytė, Brazionienė & Gadeikienė, 2010). However, empirical evidence points to the fact that, among others, excess garbage, pollution, energy and material wastage happen as a result of consumers' consumption behaviour and, therefore, are responsible for the great majority of our environmental problems (Gan et al., 2008). It is against this background that the signed Kyoto Protocol, which came into force in 2005 to fight climate change and global warming, became a point of reference (Cambra-Fierro et al., 2008). This, in turn, has raised consumers' interest in environmental issues such as recycling, energy saving and so on (Leonidou et al., 2010). For this reason, the issue of environmental ethics is prominent in the agendas of organisations and consumers alike (Yadav & Pathak, 2017).

Based on this declaration, it is clear that the environment has become an essential issue that shapes how products are developed, packaged, marketed and disposed of (Gan et al., 2008). One can, therefore, argue that the purchase of environmentally friendly products by consumers can be an effective way to minimise the degradation of the environment (Yadav & Pathak, 2017). The purchase of environmentally friendly products is not only relevant to environmentalists and ecologists, but also to social, economic, political as well as managerial scientists and practitioners (de Medeiros et al., 2014). The reduction of air pollution has the beneficial prospect of improving the health of the ecosystem and individuals, while simultaneously the decrease in carbon dioxide emissions would significantly slow global warming (Harmann & Apaolaza-Ibáñez, 2012). It is encouraging to note a steady increase in the purchase of environmentally friendly products (Ali & Ahmad, 2012).

2.1. Consumer behaviour and purchase intention of environmentally friendly products

Paul, Modi and Patel (2016) describe environmentally-friendly purchase intention as the extent to which consumers show their willingness/readiness to buy environmentally friendly products or adopt what they call 'green choices/alternatives'. Another perspective regarding environmentally friendly purchase intention is the probability and willingness of a consumer to prefer products that are viewed as possessing eco-friendly features over the more traditional ones (Ali & Ahmad, 2012). Harmann and Apaolaza-Ibáñez (2012) stated that consumers may consume environmentally friendly products to show that they have a favourable attitude towards these products. Similarly, Cheah and Phao (2011) posit that altruism and motivation of the individual play an important role in the purchase intention of environmentally friendly products.

However, one must be cognisant of the fact that not all consumers who manifest a positive attitude towards environmentally friendly products necessarily purchase them (Shao et al., 2016). Scott and Vigar-Ellis (2014) found that notwithstanding the fact that consumers had knowledge and believed in the benefits of environmentally friendly products, their behaviour reflected limited action because less than 50 percent of them reused packaging and one in three recycled packaging. The above findings affirm the view of Gan et al. (2008) that being environmentally concerned does not necessarily manifest an association with a change in consumption behaviour towards environmentally friendly products. Plausible reasons could be the low income of consumers or the unavailability of the products (Paul et al., 2016) <<On first mention, all the author names should be given >>. However, there is evidence that concern for the natural environment plays a vital role when consumers decide to purchase or not to purchase environmentally friendly products (Harmann & Apaolaza-Ibáñez, 2012).

2.2. Theory of planned behaviour

The Theory of Planned Behaviour (TBP) contends that intentions precede the behaviour of a person (Ajzen, 1991). According to the TBP, the formation of intentions is described through an individual's attitude towards the behaviour, the subjective norms such as the views of friends and family, and the individual's perception of behavioural control. In support of the TBP, Paul et al. (2016) are of the view that when there is an expectation of a shift in attitude towards environmentally friendly products, the likelihood is that the intention to purchase them would increase. Similarly, when consumers are of the view that someone

important to them endorses the purchase of environmentally friendly products, they are more likely to adopt the behaviour. Young, Hwang, McDonald and Oates (2010) caution that when consumers adopt an environmentally friendly lifestyle which is sustainable, they engage in an increasing decision-making process that is very complex and difficult. Previous research on consumer behaviour has shown that intention is the best predictor of behaviour. This study, therefore, used the elements of TPB, namely attitudes, subjective norms and perceived behavioural control to investigate the purchase intention of environmentally friendly products among consumers in South Africa. In addition, environmental knowledge and environmental concern are also known to influence the purchase intention of environmentally friendly products.

Paul et al. (2016) pointed out that empirical evidence indicated that consumers in the developed world tend to be more concerned about the environment than those in the developing world. It therefore came as no surprise that most studies on consumers' purchase intentions regarding environmentally friendly products were conducted mainly in the developed world (Yadav & Pathak, 2017). South Africa, as a developing nation, has not developed sufficient infrastructure for sustainable behaviour and, for this reason, its consumers have little exposure to sustainability practices compared to the developed countries (Scott & Vigar-Ellis, 2014). This situation occurs even though South Africa is one of the biggest polluters of the planet regarding greenhouse gas emission, being ranked 14th in the world (Borel-Saladin & Turok, 2013). The purpose of this study was to investigate the purchase intention of South African consumers towards environmentally friendly products using the Theory of Planned behaviour.

3. METHODOLOGY

The researcher embarked on an intensive literature review to collect secondary data. Furthermore, to collect primary data, this study adopted a quantitative approach which is systematic and uses statistical techniques to analyse data. The researcher distributed self-administered questionnaires among South African consumers. The Statistical Package for Social Sciences (IMB Version 25) was used to analyse data. Descriptive statistics was used to analyse the demographic data of participants. Factor analysis was used to identify the factors that influence purchase intention of environmentally friendly products. Correlation analysis was used to establish the relationship among variables. Regression analysis was used to investigate the predictive influence of independent variables on the dependent variable.

3.1. Sample

The sample comprised consumers in South Africa. A probability sampling technique, which gives respondents an equal chance of participating in a study, was used to gather data.

3.2. Measuring instrument

The questionnaire was developed after taking items from previous similar studies. Section A of the questionnaire comprised statements requesting the demographic information of participants. Section B comprised statements regarding factors influencing purchase intention of environmentally friendly products, whereas Section C comprised statements measuring purchase intention for environmentally friendly products. In Sections B and C, a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used.

3.3. Data collection

The researcher distributed the questionnaires in shopping malls in one province of South Africa. A random invitation of participants was followed. The participants completed the questionnaires in the presence of the researcher and in this way increased the response rate. A total of 200 questionnaires were deemed legible (*Comment to author: do you mean valid ?*) to use.

3.4. Reliability and validity analysis

Cronbach's alpha test was used to determine the reliability of the measuring instrument. According to Nunnally (1978), the reliability is acceptable when the value is 0.7 or above. The reliability values of the constructs, namely attitude (0.885), subjective norms (0.917), perceived behavioural control (0.817), environmental concern (0.719), environmental knowledge (0.800) and purchase intention (0.924) were above the recommended 0.7 value. Furthermore, the face, content and convergent validity of the measuring instrument were established. Two experienced researchers checked the instrument for errors and ensured that the construct items measure what they are intended to. Factor analysis was used to check whether the items loaded on the factors. The individual item loading for the constructs ranged between 0.415 and 0.905, thus above the recommended 0.4 value (Pallant, 2013). Table 1 provides the Cronbach's alpha values and item loadings.

4. ETHICAL CONSIDERATIONS

In line with the guidelines of academic research, the researcher complied with several ethical considerations. Before the participants participated in the study, the researcher explained the purpose of this research. Among others, it was explained that participation was voluntary and that they may withdraw at any time without repercussions. Furthermore, the researcher assured them that they would remain anonymous, as the study was for academic purposes only. The participants were also informed that the results would be reported in an aggregate format.

5. RESULTS

5.1. Sample profile

Out of the 200 questionnaires analysed, 61.5% (n=123) of participants were females and 38.5% (n=77) males. The participants' age ranged between 18 and 73 years. In terms of race, the majority of those who participated were black, comprising 87.5% (n=175) of the total, followed by whites, comprising 8%, and lastly coloureds, comprising 4.5% (n=9). Furthermore, in terms of qualifications, the majority of participants had a degree, comprising 55.5% of the total.

5.2. Factor analysis

To establish the factorability of data, the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity were performed on Section B and C of the questionnaire. In Section B, the KMO value of 0.841 indicated that the data were acceptable (Pallant, 2013) and Bartlett's test of sphericity was significant at 0.000, supporting the factorability of the data (Malhotra, 2010). Five factors that may influence purchase intention of environmentally friendly products were extracted and labelled attitude, subjective norms, perceived behavioural control, environmental concern and environmental knowledge. The five factors accounted for 61.238% of the variance explained. Table 1 provides a detailed report on the factor structure. Similarly, in Section C of the questionnaire the KMO value of 0.909 indicated that the data were acceptable (Pallant, 2013) and Bartlett's test of sphericity was significant at 0.000, supporting the factorability of the data. One factor, labelled purchase intention of environmentally friendly products, was extracted and accounted for 65.429% of the variance explained.

Table 1: Scale reliability

Research constructs		Descriptive		Cronbach's test		Factor
		Mean	SD	Item-total	α value	
Perceived behavioural	PBC1	3.846	0.89	0.820	0.917	0.757
	PBC2			0.816		0.743
	PBC3			0.822		0.710
	PBC4			0.810		0.691
	PBC5			0.826		0.501
	PBC6			0.830		0.466
	PBC7			0.832		0.452
Subjective norms	SN1	3.236	0.99	0.890	0.917	-0.905
	SN2			0.891		-0.902
	SN3			0.905		-0.848
	SN4			0.899		-0.818
	SN5			0.906		-0.768
Attitudes	ATT1	3.580	0.95	0.749	0.811	0.830
	ATT2			0.810		0.730
	ATT3			0.754		0.702
	ATT4			0.758		0.616
	ATT5			0.800		0.415
Environmental concern	EC1	4.285	0.73	0.660	0.719	0.817
	EC2			0.657		0.706
	EC3			0.649		0.686
	EC4			0.664		0.679

Environmental	EK1	3.289	1.00	0.760	0.807	0.889
	EK2			0.755		0.885
	EK3			0.799		0.503
	EK4			0.748		0.448
	EK5			0.781		0.418
Purchase intention	PI1	4.07	0.77	0.913	0.924	0.843
	PI2			0.915		0.833
	PI3			0.912		0.828
	PI4			0.915		0.814
	PI5			0.912		0.800
	PI6			0.911		0.800
	PI7			0.915		0.796
	PI8			0.919		0.755

PBC: Perceived behavioural control items; SN: Subjective norms items; ATT: Attitudes items; EC: Environmental concern items; EK: Environmental knowledge items; PI: Purchase intention items

5.3. Correlation

Correlation analysis was conducted to establish whether there was any significant relationship between the factors that may influence the purchase intention of environmentally friendly products. A statistically significant correlation between the factors that influence purchase intention of environmentally friendly products and purchase intention was found. The correlation matrix in Table 2 revealed a strong correlation (0.542) between attitudes and purchase intention of environmentally friendly products at $p < 0.001$. A moderate correlation (0.363) between subjective norms and purchase intention of environmentally friendly products existed, whereas a strong correlation (0.665) between perceived behavioural control and purchase intention of environmentally friendly products was found. These are all factors that describe the Theory of Planned Behaviour (TPB). This finding is consistent with Paul et al. (2016) when they state that a shift in individuals' attitude towards environmentally friendly products and an indorsement by someone that they regard as important may influence the purchase

of environmentally friendly products. This finding is a step in the right direction. Furthermore, correlation analysis in Table 2 revealed a moderate relationship (0.452) between environmental concern and purchase intention of environmentally friendly products. These results support the findings of Harmann and Apaolaza-Ibáñez (2012) that when people are concerned about the environment, they tend to purchase environmentally friendly products. On the other hand, correlation analysis revealed a strong relationship (0.544) between environmental knowledge and purchase intention of environmentally friendly products. Consistent with the findings of Mostafa (2007), these results confirm that people's knowledge of the environment, attitude and concern for the environment influence the purchase of environmentally friendly products.

Table 2: Correlation analysis

		ATT	SN	PBC	EC	EK	PI
Attitudes	Pearson correlation	1					
	Sig. (2-tailed)						
	N	200					
Subjective norms	Pearson correlation	0.486**	1				
	Sig. (2-tailed)	0.000					
	N	200	200				
Perceived behavioural control	Pearson correlation	0.675**	0.382**	1			
	Sig. (2-tailed)	0.000	0.000				
	N	200	200	200			
Environmental concern	Pearson correlation	0.370**	0.189**	0.373**	1		
	Sig. (2-tailed)	0.000	0.008	0.000			
	N	200	200	200	200		
Environmental knowledge	Pearson correlation	0.563**	0.391**	0.540**	0.294**	1	
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		
	N	200	200	200	200	200	
Purchase intention of environmentally friendly products	Pearson correlation	0.542**	0.363**	0.665**	0.452**	0.544**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
	N	200	200	200	200	200	200

** Correlation is significant at the 0.01 level (2-tailed)

5.4. Regression

Multiple regression analysis was conducted to establish whether attitudes, subjective norms, perceived behavioural control, environmental concern and environmental knowledge influence purchase intention of environmentally friendly products among South African consumers. As depicted in Table 3, multi-collinearity issues were met. The tolerance values ranged between 0.431 and 0.827, which is not less than 0.10, and the variance inflation factor (VIF) ranged between 1.209 to 2.322, which is not more than 10 (Pallant, 2013). The results of the regression analysis indicated that attitudes (Beta = 0.039) and subjective norms (Beta = 0.063) had an insignificant influence on the purchase intention of

environmentally friendly products among South African consumers. Conversely, perceived behavioural control (Beta = 0.423), environmental concern (Beta = 0.196) and environmental knowledge (Beta = 0.210) contributed significantly towards the intention to purchase environmentally friendly products. This finding was in line with what Young et al. (2010) found. Their study revealed that while consumers were aware of environmental issues, they found it very difficult to translate that into purchase decision. This could be interpreted as suggesting that even though they were environmentally aware, their attitude did not force them to purchase environmentally friendly products. Table 3 provides the results of multiple regression analysis.

Table 3: Multiple regression analysis with purchase intention of environmentally friendly products as dependent variable

Model Independent variables	Unstandardised coefficients		Standardised coefficients		Sig.	Collinearity statistics	
	B	Std error	Beta	t		Tolerance	VIF
(Constant)	0.925	0.267		3.472	0.001		
Attitudes	0.039	0.075	0.039	0.513	0.609	0.431	2.322
Subjective norms	0.045	0.042	0.063	1.089	0.277	0.490	2.040
Perceived behavioural control	0.345	0.057	0.428	6.047	0.000*	0.740	1.351
Environmental concern	0.227	0.063	0.196	3.602	0.000*	0.827	1.209
Environmental knowledge	0.167	0.050	0.210	3.345	0.001*	0.621	1.610

* $p < 0.05$ Dependent variable: Purchase intention of environmentally friendly products. $F = 43.17$; $R = 0.727$; $R^2 = 0.529$; Adjusted $R^2 = 0.517$

6. DISCUSSION

There is an unprecedented need to purchase environmentally friendly products. The status quo cannot remain. The survival of future generations depends on how the current generation preserves the natural resources. The results of this study indicated that the consumer in South Africa regards this issue as very serious. As indicated by the mean score ($x = 4.07$) in Table 1, consumers in South Africa manifest intention to purchase environmentally friendly products. This could be

the beginning of good things should they follow up on their intention and purchase these products. This assertion is made since the market share for environmentally friendly purchases is a measly 5% (Young et al., 2010). South Africa, like other countries around the world, is vulnerable to natural disasters. In the recent past we have observed the devastations brought by drought, floods and rising sea levels. The recent phenomenon being the floods that claimed the lives of many people in the KwaZulu-Natal and Eastern Cape provinces of South Africa. Past studies have revealed a direct correlation between the degradation of the environment and the consumption of products harmful to the environment.

The results of the study through correlation analysis indicated a positive direct relationship between the factors and the purchase intention of environmentally friendly products. Furthermore, regression analysis shows that perceived behavioural control, environmental knowledge and environmental concern had a predictive influence on purchase intention of environmentally friendly products. In line with this, Mostafa (2007) found that environmental knowledge, environmental concern and attitude had a predictive influence on purchase intention of environmentally friendly products. However, in the case of attitude, the South African consumers' attitude showed an insignificant predictive influence on intention to purchase environmentally friendly products. One plausible reason could be cultural differences between the two nations. (*Comment to author: which two nations? State South Africa and ...*) Young et al. (2010) referred to this as the "attitude-behaviour gap" or values and action gap. This is when consumers indicate that they are very much concerned about the environment but lack the courage to translate it into purchase of environmentally friendly products. Nonetheless, it is encouraging to observe that South African consumers are knowledgeable and concerned about the environment. One could only hope that the prospects for purchasing environmentally friendly products will improve.

7. LIMITATIONS AND FUTURE RESEARCH

Limitations are a hallmark of all research. Therefore, like other studies, this study has limitations. Firstly, the survey was conducted in only one province of South Africa and, therefore, the views of the participants do not necessarily represent those of consumers in South Africa in entirety. It is recommended that future studies should broaden the scope and include participants from other provinces. Furthermore, the study only used selected factors that may influence the purchase intention of environmentally friendly products. Purchase intention can be influenced by a myriad of factors that did not form part of this study. Therefore,

future research should include factors such as income level, education level and many others.

8. RECOMMENDATIONS AND CONCLUSIONS

The findings revealed that consumers in South Africa have the intention to purchase environmentally friendly products. The question is whether they will walk the talk? Perhaps environmentally friendly products are beyond the means of the majority of South Africans, since they are perceived as expensive. Therefore, government and business should devise means to ensure that these products are affordable for many South Africans. Based on the result of this study, future research should investigate other reasons that cause consumers to not change their attitudes, even though they are aware of the environmental issues and being concerned about them. Tangible action is needed to encourage everyone to know and understand the significance of purchasing environmentally friendly products. Government should intensify compliance with the laws regulating the usage of harmful products. These laws are meaningless without enforcement.

REFERENCES

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ali, A. & Ahmad, I. (2012). Environment friendly products. Factors that influence the green purchase intention of Pakistani consumers. *Pakistan Journal of Engineering and Technological Sciences*, 2(1), 84-117.
- Anvar, M. & Venter, M. (2014). Attitudes and purchase behaviour of green products among Generation Y consumers in South Africa. *Mediterranean Journal of Social Sciences*, 5(21), 183-194.
- Banytė, J., Brazionienė, L. & Gadeikienė, A. (2010). Investigation of green consumer profile: a case of Lithuanian market of eco-friendly food products. *Economics and Management*, 5, 374-383.
- Borel-Saladin, J.M. & Turok, I.N. (2013). The impact of the green economy on jobs in South Africa. *South African Journal of Science*, 109(9/10), 1-4.
- Brécard, D., Hlaimi, B., Lucas, S., Perraudeau, Y. & Salladarré, F. (2009). The determinants of demand for green products: an application of eco-label demand for fish in Europe. *Ecological Economics*, 69, 115-125.

- Cambra-Fierro, J., Hart, S. & Polo-Redondo, Y. (2008). Environmental respect: ethics or simply business? A study in the small and medium enterprise (SME) context. *Journal of Business Ethics*, 82, 645-656.
- Cheah, I. & Phao, I. (2011). Attitudes towards environmentally friendly products. The influence of eco-literacy, interpersonal influence and value orientation. *Marketing Intelligence and Planning*, 29(5), 452-472.
- De Medeiros, J.F., Ribeiro, J.L.D. & Cortimiglia, M.N. (2014). Success factors for environmentally sustainable product innovation: a systematic literature review. *Journal of Cleaner Production*, 65, 76-86.
- Gan, C., Wee, H.G., Ozanne, L. & Kao, T.H. (2008). Consumers' purchasing behaviour towards green products in New Zealand. *Innovative Marketing*, 4(1), 93-102.
- Goh, S.K. & Balaji, M.S. (2016). Linking green scepticism to green purchase behaviour. *Journal of Cleaner Production*, 131, 629-638.
- Harmann, P. & Apaolaza-Ibáñez, P. (2012). Consumer attitude and purchase intention toward green energy brands. The roles of psychological benefits and environmental concern. *Journal of Business Research*, 65, 1254-1263.
- Haws, K.L., Winterrich, K.P. & Naylor, R.W. (2014). Seeing the world through GREEN-tinted glasses: green consumption values and responses to environmentally friendly-products. *Journal of Consumer Psychology*, 24(3), 336-354.
- Leonidou, L.C., Leonidou, C.N. & Kvasova, O. (2010). Antecedents and outcomes of consumer environmentally friendly attitudes and behaviour. *Journal of Marketing Management*, 24(13/14), 1319-1344.
- Malhotra, N.K. (2010). *Marketing research: An applied orientation*. Upper Saddle River, NJ: Pearson/Prentice Hall.
- Mostafa, M.M. (2007). Gender differences in Egyptian consumers' green purchase behaviour: the effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies*, 31, 220-229.
- Nunally, J.C. (1978). *Psychometric Theory*. New York: McGraw-Hill.
- Pallant, J. (2013). *SPSS survival manual. A step by step guide to data analysis using IBM SPSS*. 5th Ed. Open University Press: McGraw-Hill.

Paul, J., Modi, A. & Patel, J. (2016). Predicting green product consumption using the theory of planned behaviour and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123-134.

Scott, L. & Vigar-Ellis, D. (2014). Consumer understanding, perceptions and behaviour about environmentally friendly packaging in a developing nation. *International Journal of Consumer Studies*, 38, 642-649.

Shao, J., Taish, M. & Ortega-Mier, M. (2016). A grey-decision-making trial and evaluation laboratory (DEMATEL) analysis on barriers between environmentally friendly products and consumers: practitioners' viewpoints in the European automobile industry. *Journal of Cleaner Production*, 112, 3185-3194.

Yadav, R. & Pathak, G.S. (2017). Determinants of consumers' green purchase behaviour in a developing nation: applying and extending the theory of planned behaviour. *Ecological Economics*, 134, 114-122.

Young, W., Hwang, K., McDonald, S. & Oates, C.J. (2010). Sustainable consumption: green consumer behaviour when purchasing products. *Sustainable Development*, 18, 20-31.

THE DISCLOSURE OF CORPORATE GOVERNANCE: A TICK-BOX EXERCISE OR NOT?

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—Abstract—

The King Committee published the first King Report on corporate governance in 1994. The King II and III Reports, implemented in 2002 and 2010 respectively, placed progressively more emphasis on proper disclosure of corporate governance practices. King IV, published in 2016, strives to encourage management to focus on governance and not regard it as mindless compliance. Different stakeholders raised concerns that the continued corporate scandals could be, on a large scale, attributed to shortcomings in corporate governance practices. One of the objectives of King IV is to promote corporate governance as an integral part of effective management.

The aim of this study is to assess whether the disclosure on governance, by selected Johannesburg Stock Exchange (JSE)-listed companies, is sufficient to confirm to users of financial statements that sound corporate governance is a priority in these companies. A documentary review of the latest governance reports of these companies was done to evaluate compliance with the King IV principles in general.

The results indicated that all of these companies disclosed that they are in general complying with the 17 principles of King IV; however, the ongoing global and local corporate failures may be an indication that sound corporate governance is not a priority, but is still dealt with as a “tick-box” exercise.

The recommendation from this study is that boards of directors should be held accountable for setting practices and strategies that are aligned with the King codes, to ensure effective management and control of business entities.

Keywords: Corporate governance disclosure, JSE-listed companies, King II, King III, King IV

JEL Classification: G34

1. INTRODUCTION

The ongoing large corporate failures serve as a primary argument for the successful implementation of sound corporate governance principles and practices, followed by the effective disclosure thereof in the annual reports of companies. The Institute of Directors in South Africa (IoDSA) tasked retired judge, Mervyn King to lead a team of experts to develop the King Reports of corporate governance for South Africa. This exercise spanned over a timeframe of more than 20 years, beginning with the introduction of King I in 1994, King II in 2002, King III in 2009 and the latest, King IV in 2016. These codes reiterated the fact that sound corporate governance practices are an indispensable part of effective management. Naudé et al. (2018) defined corporate governance as the “system whereby business organisations are directed and controlled.” It is therefore important that basic governance principles such as accountability and business ethics inform board processes. King IV emphasises that transparency and accountability are equally important, which necessitates the disclosure of not only what has been done, but also the thinking behind it (IoDSA, 2018). It is therefore up to the shareholders and other stakeholders, including regulators, to hold boards accountable for the implementation of good governance.

Van Vuuren (2006 and 2016) revealed in previous studies that the failure of several large companies could possibly have been prevented if sound corporate governance practices were in place. Kirkpatrick (2009) recognised that the serious global financial crisis of 2008/2009 could largely be attributed to deficiencies in corporate governance practices. The Organisation for Economic Co-operation and Development (OECD, 2014) reported that high-profile corporate failures such as Enron, WorldCom and Saambou Bank were partially the result of inadequate corporate governance practices. Modiha (2018) opines that if good corporate governance principles were embedded within an organisation, these corporate scandals would not have occurred. He further states that these failures are an indication of serious deficiencies in most organisations’ governance practices.

All these companies appeared to have complied with all listing and legal requirements, which may have resulted in a false sense of security regarding their compliance with good governance practices. These collapses, among others, resulted in a renewed interest in corporate governance globally. The OECD

(2014) suggests that, although effective corporate governance practices by itself may possibly not have prevented these collapses, it could have at least reduced the catastrophic impact of these failures. IoDSA (2018) states that the ongoing recent corporate scandals stimulated renewed focus on the role of directors and the significance of sound governance. If corporate governance is treated as a “tick-box” exercise without it being underpinned by an ethical commitment of done all stakeholders, it merely becomes lip service as to the effectiveness thereof.

The aim of this study is thus, to determine if selected JSE-listed companies disclosed their compliance to the principles outlined by King IV (Table 1) in such a manner, that users of the annual reports are assured that sound corporate governance is a priority in the company. This is done to determine if corporate governance disclosure is merely a “tick-box” exercise in order to comply with JSE listing requirements.

1.1. The background and aim of the King Reports of corporate governance

The four King Reports on corporate governance, developed by IoDSA, have the objective to formalise the implementation and disclosure of effective corporate governance practices. The first code (King I) became effective in 1994 and aimed to institutionalise corporate governance (IoDSA, 2002). King II expanded on King I and became effective in 2002. Most of the principles included in King II were incorporated into the SA Companies Act of 2008 (IoDSA, 2009); where-after King III was developed and introduced in 2009. The latter embraced a “risk-centric approach” to corporate governance (SAICA, 2013) and King III continued to put South Africa in the lead on the development of pioneering governance principles internationally (IoDSA, 2009). King IV was introduced in 2016 and an “outcome-based” approach was followed. As the King Codes recognise that ethics is a choice, it always has been a voluntary code (IoDSA, 2018), which is in contrast with set laws. A voluntary code like King strives to set out the principles and best practices that organisations with a true desire to achieve good governance should follow (IoDSA, 2018). Despite the fact that compliance with the King Code is voluntary, it is a mandatory requirement for all JSE-listed companies to comply with and report on King IV (JSE, 2011, 2017).

The principle-based King III report on governance for South Africa required more detailed corporate governance disclosure; but it also allowed more flexibility for the board of directors to deviate from the recommendations of the King Report, providing that such deviations were explained in their annual report. The reason for this flexibility was to allow boards of directors to implement best practices for

the particular business, as opposed to a mindless adherence to each and every recommendation of the report (IoDSA:2009). This freedom to deviate from the recommendations in the report, however, resulted in the implementation of King III to become a “tick-box” exercise. A possible reason for this could be that King III has 75 principles, which made it very exhaustive for companies to implement and monitor, while King IV took a different structural approach by boiling down good governance into 17 simplified principles (Table 1). One of the objectives for the reduced principles was in fact to prevent another “tick-box” exercise, as King IV demands a mindful application of the code, as opposed to a compliance exercise (PWC, 2016). King IV requires entities to comply with the recommendations of the report and explain on what grounds it can state, with reasonable certainty, that the entity practices good governance.

These 17 principles are complimented with guidance on recommended disclosure practices under each of the principles, which serves as the starting point for disclosure. The detail of these disclosures should be steered by materiality, with the objective to equip stakeholders with the necessary information to make a well-educated assessment of the quality of an organisation’s governance (IoDSA, 2016). It is important to note that, although King IV requires detail disclosures and explanations on the compliance to the 17 principles, it does not require disclosure on the implementation of each practice. King IV, therefore, offers flexibility and aids companies to achieve good corporate governance in ways that are appropriate to their specific conditions without undue constraint. Full compliance with the King Reports could assist governing bodies with the protection of the entity against unreasonable risk-taking, as well as preserving the survival, sustainability and wealth of the entity for all stakeholders. King IV also has an enhanced focus on stakeholder inclusion and disclosure. This emphasises the fact that the disclosure of corporate governance practices, is still very important for effective corporate governance, transparency and sustainability.

1.2. Corporate governance disclosure

The OECD (2017) explains that effective corporate governance plays a crucial role “in underpinning the integrity and efficiency of financial markets.” Ineffective corporate governance diminishes a company’s potential to be successful, while well-governed entities will attract good investments in the entity, which will in return ensure sustainability and growth. King III refers to corporate governance as a set of practices in an entity to ensure “fairness, accountability and transparency” for all its stakeholders (IoDSA, 2009). Effective corporate governance practices are critical to strengthen access to external capital

and continued advancement in an entity's performance, which will result in sustainable economic development and growth. King IV defines corporate governance as the exercising of ethical and effective leadership, to achieve an "ethical culture, good performance, effective control and legitimacy" for the entity, (IoDSA, 2016).

The International Finance Corporation (IFC, 2013) concluded that effective corporate governance structures assist entities in conducting better business, better access to funding, improving their risk-mitigation strategies and protecting the entity against mismanagement. Konstans et al. (2011) conclude that corporate governance is essential for the long-term prosperity of stakeholders. Abor and Adjasi (2007) refer to corporate governance as the processes that are in place to manage the organisation while optimising wealth and accountability, with a focus on long-term value creation for all stakeholders. Van Vuuren (2016) opined that corporate governance is thus an indication of management's quality and efficiency, with reference to accountability, leadership, risk management and reporting. Madigan (2018) states that good corporate governance should ensure effective use of resources and that accountability is properly assigned.

As stakeholders have to rely on the annual reports of companies to inform them of the effectiveness of corporate governance within the organisation, the proper disclosure of governance principles and practices is pivotal. Previous studies performed by Van Vuuren (2006 & 2016), indicated that there is a contradiction between the very nature of effective corporate governance reporting and the natural instinct of preparers of annual reports to always be positive, resulting in corporate governance reports in certain instances to be too generic and biased. The fact that the majority of the 17 King IV principles (Table 1) address characteristics such as "ethical culture, good performance, effective leadership and legitimacy" (IoDSA, 2016), may result in generic disclosures, as these principles are hard to quantify. Although there are a number of recommended practices under each of the 17 principles, King IV (2016) states that there is no need to disclose whether each practice has been implemented. This may increase the risk of generic and biased disclosures.

Manganye (2019) concludes that, "In an era of trade wars and Brexits, there is a lot to worry about and governance might be falling to the wayside as a result". The author further explains that South Africa is showing increasing signs of declining governance with reference to the recent exposure of seemingly huge shortfalls in governance at large organisations. Natesan and Du Plessis (2019) opined, "It's not what you do, but why, that counts in corporate governance".

They continue to emphasise the importance of good disclosure, in order to confirm to stakeholders that the organisation did what they said they would do and what the results were. Canter (2018) opines that the tick-box assessment of corporate governance practices fails to address the profound measures of sound governance of “governance policy” put into “governance practice”. He further states that governance practices should be “principled, robust and sustainable”. For this reason, disclosure has become an extremely important element of sound corporate governance in terms of the “apply and explain” approach of King IV.

2. METHODOLOGY

It is a listing requirement that companies with a primary listing on the JSE must adhere to King IV (JSE, 2017) and is therefore representative of this study’s population. Judgement sampling was used to select the top 40 companies with a primary listing on the JSE from the top 100 listing as determined by SHARENET (2019). These companies represent a variety of industries in South Africa and are the largest based on market capitalisation (JSE, 2019). The use of market capitalisation as an indicator is justified, as it measures the aggregate value of a company (Investor-Words, 2019). The selected top 40 JSE-listed companies represent 84% of the total market capitalisation of the top 100 JSE-listed companies (excluding companies that do not have a primary listing on the JSE, as these companies are not required to comply with King IV).

As King IV only became effective from 1 April 2017, the most recent annual reports after 1 April 2017 was analysed to determine the level of disclosure on the compliance with the 17 principles of King IV in general. The reason for only evaluating the annual reports for adherence to the 17 principles of King IV and not the underlying practices as well, is because King IV specifically states that there is no need to disclose whether each practice has been implemented or not. A qualitative documentary review was conducted on these annual reports, which was the dominant approach. Swart (2018:12) illustrated that the selected reports are classified as secondary data and a qualitative documentary analysis can be performed, as the secondary data is available in the public domain.

In addition to this review of the annual reports of the selected top 40-JSE listed companies, a literature review was performed on corporate governance and the disclosure thereof. Thereafter a literature review was done on a few companies that suffered financial collapses to determine if corporate governance (or the lack there-of) could have contributed to their demise.

3. RESEARCH FINDINGS AND DISCUSSION

3.1. Findings on the disclosure of the compliance with King IV

The aim of this study was to determine if the selected JSE-listed companies disclosed their compliance to the principles outlined by King IV (Table 1) in such a manner, that it is clear to the users of the annual reports that sound corporate governance is a priority. Although the 17 principles are accompanied by recommended disclosure practices, King IV states that, “there is no need to disclose whether each practice has been implemented or not. For this reason, this study only focused on the disclosure of the compliance with the 17 principles (Table 1) of King IV and not on the disclosure of the recommended practices under each of the principles.

Table 1: 17 Principles of King IV (King IV, IoDSA 2016)

	<u>Principle</u>	<u>% of selected companies that disclosed compliance with the principle</u>
1.	The governing body should lead ethically and effectively.	100%
2.	The governing body should govern the ethics of the organisation in a way that supports the establishment of an ethical culture.	100%
3.	The governing body should ensure that the organisation is and is seen to be a responsible corporate citizen.	100%
4.	The governing body should appreciate that the organisation’s core purpose, its risks and opportunities, strategy, business model, performance and sustainable development are all inseparable elements of the value creation process.	100%
5.	The governing body should ensure that reports issued by the organisation enable stakeholders to make informed assessments of the organisation’s performance, and its short-, medium- and long-term prospects.	100%
6.	The governing body should serve as the focal point and custodian of corporate governance in the organisation.	100%
7.	The governing body should comprise the appropriate balance of knowledge, skills, experience, diversity and independence for it to discharge its governance role and responsibilities objectively and effectively.	100%

8.	The governing body should ensure that its arrangements for delegation within its own structures promote independent judgement, and assist with balance of power and the effective discharge of its duties.	100%
9.	The governing body should ensure that the evaluation of its own performance and that of its committees, its chair and its individual members, support continued improvement in its performance and effectiveness.	100%
10.	The governing body should ensure that the appointment of, and delegation to, management contribute to role clarity and the effective exercise of authority and responsibilities.	100%
	<u>Principle</u>	<u>% of selected companies that disclosed compliance with the principle</u>
11.	The governing body should govern risk in a way that supports the organisation in setting and achieving its strategic objectives.	100%
12.	The governing body should govern technology and information in a way that supports the organisation setting and achieving its strategic objectives.	100%
13.	The governing body should govern compliance with applicable laws and adopted, non-binding rules, codes and standards in a way that supports the organisation being ethical and a good corporate citizen.	100%
14.	The governing body should ensure that the organisation remunerates fairly, responsibly and transparently to promote the achievement of strategic objectives and positive outcomes in the short-, medium- and long-term.	100%
15.	The governing body should ensure that assurance services and functions enable an effective control environment and that these support the integrity of information for internal decision-making and of the organisation's external reports.	100%
16.	In the execution of its governance role and responsibilities, the governing body should adopt a stakeholder-inclusive approach that balances the needs, interests and expectations of material stakeholders in the best interests of the organisation over time.	100%
17.	The governing body of an institutional investor organisation should ensure that responsible investment is practised by the organisation to promote the good governance and the creation of value by the companies in which it invests. (Where applicable).	100%

Source: King IV (IoDSA: 2016)

Table 1 illustrates that all 40 JSE-selected companies disclosed in their latest annual reports that they comply with each of the 17 principles of King IV where applicable. The detail disclosures between the selected companies differ, however King IV is not prescriptive on how much detail should be given as a minimum. It could thus be concluded that JSE-listed companies are disclosing their adherence to the principles of sound corporate governance in accordance with King IV. This finding raises the concerning question that, if these JSE-listed companies disclose that they are adhering to sound corporate governance principles, why is the number of local as well as global corporate failures, which could partially be attributed to inadequate corporate governance practices, showing an increase? A possible explanation might be that compliance is still treated as a “tick-box” exercise. This study focused on JSE-listed companies, however the large corporate scandals all-over the world that could partially be attributed to poor corporate governance, might be an indication that this concern is a global phenomenon. This observation is strengthened by the following case studies:

3.2. South African corporate failures that could partially be attributed to weaknesses in corporate governance practices:

3.2.1. Steinhoff International Holdings N.V. (Steinhoff):

Naudé et al. (2018) indicated that Steinhoff appeared to have always complied with all listing requirements. Therefore it raises the question whether corporate governance might be seen as a “tick-box” exercise. Steinhoff had the following declaration in their annual report for the year ending on 30 September 2016 (the last annual report before their collapse), which strengthens this concern:

“The aim of this annual report is to provide stakeholders with an overview of the approach of the Steinhoff International Holdings N.V. group (the group) to corporate governance, at both group and divisional level, and to demonstrate that the group’s businesses and assets across the globe are managed responsibly and in a sustainable manner...” (Steinhoff annual report, 2016).

Before the annual reports for the 2017 year-end could be published, the global business world was shocked by the devastating financial collapse of Steinhoff when the company lost nearly 85% of its market value since the end of 2017 (Rossouw and Styan, 2019). Before its demise, Steinhoff was among the top-10 companies on the JSE, with a market capitalisation of around R300 billion. Their share price fell below R1.50 per share in 2017 from a peak of R96.85 per share on 31 March 2016 (Business Tech, 2017). Full details of the Steinhoff downfall are still transpiring, but it quickly became eminent that corporate governance failure

was a huge contributor to the near-total collapse of this once powerful company. Some conclusions that can already been drawn from Steinhoff, are the risk of too much power in the hands of individuals and the restrictions of a two-tier board. The question to be answered if Steinhoff can ever return to its former pride.

3.2.2. Tongaat Hulett Ltd. (Tongaat)

In their integrated report of 30 September 2018, the board of Tongaat made the following declaration in terms of corporate governance:

“The company’s approach to corporate governance continues to reflect that governance is regarded by the Board as being more than a mere compliance exercise that measures basic compliance with King IV™, but rather confirms that best practice principles are effectively applied and embedded by the company in its daily activities, resulting in short and long-term value creation for all stakeholder”.

Shortly after this declaration in the 2018 Annual report of Tongaat, the business world was shaken when the JSE Stock Exchange News Service (SENS), published a cautionary announcement on 8 March 2019 made by the biggest sugar producer in South Africa, Tongaat Hulett Ltd. In this announcement, investors were warned to be cautious when dealing in the company’s shares. On 10 June 2019, the Board of Tongaat requested the JSE to suspend their listing until further notice and made the following declaration:

“The Board has now reached a conclusion that the need to restate the March 2018 Financial Statements, and the consequential impact on the 30 September 2018 statement of financial position, renders reliance on the unaudited interim results for the six months ended 30 September 2018 (“September 2018 Interim Results”) no longer appropriate...” (Tongaat Hulett - SENS, 2019). This is another example where the reality stands in contrast with what was disclosed and the final impact of the seemingly poor governance practices by this former business giant, is yet to be seen.

3.2.3. Tiger Brands Ltd (Tiger Brands)

In the 2017 integrated report of Tiger Brands, the following was declared: *“Our governance structures, policies and standard operating procedures were reviewed and aligned to King IV principles to support our new operating model and strategy. Sound corporate governance is an integral part of the group’s success in achieving its strategic objective to create sustainable value*

Whilst the Annual report assured stakeholders that sound corporate governance was in place at the Tiger Brands group, the opposite became eminent. The South African community was shocked by the announcement from the former Minister of Health, Dr. Aaron Motsoaledi that the source of the outbreak of a deadly disease, *Listeriosis*, was traced back to a processed meat plant owned by Tiger Brands. (Department of Health, 2018). The World Health Organization (WHO) reported that this was the largest outbreak of *Listeriosis*, which resulted in more than 200 confirmed fatalities between January 2017 and June 2018. (Hunter-Adams *et al.*, 2018).

3.3. Non-South African corporate failures that could partially be attributed to weaknesses in corporate governance practices

3.3.1. Honda Motor Company Ltd (Honda) and Takata Corporation (Takata)

Khoo (2019) stated the case of Honda, a leading Japanese automobile company, and Takata, which transgressed one of the four pillars of sound corporate governance, which is transparency, by not alerting stakeholders timeously of the defects in the Takata airbag inflators installed in some Honda vehicles. Although Honda was one of several car manufacturers that used Takata airbags, the company in particular is alleged to have known about the problem well before the others. Critical details such as airbag ruptures and deaths involving its vehicles were not disclosed timeously to regulators or the public. To date Honda recalled nearly 13 million vehicles to replace faulty airbags.

3.3.2. The Volkswagen Group (Volkswagen)

Another aspect of good governance is to protect the environment; therefore, the automobile industry was shocked when the diesel emission scandal of one of its world leaders, Volkswagen in Germany, was exposed in 2015. Matussek (2018) reported that the subsequent costs incurred by the company because of their undermining of the environmental norms on its diesel vehicles, is estimated to exceed \$35 billion. Bachmann *et al.* (2019) found that the reputational spill over effect of this corporate governance scandal resulted in a reduction in the U.S. sales of the other German automobile manufacturers such as BMW, Mercedes-Benz and Smart by about 105 000 vehicles worth \$5.2 billion.

4. CONCLUSION AND RECOMMENDATIONS

The study indicates that all 40 the selected JSE-listed companies that were evaluated, disclosed compliance with the 17 principles of King IV and they

endeavoured to explain what practices are in place to ensure compliance. What is of concern, is that despite the fact that all these companies are declaring that they are compliant with King IV, the business world is shaken on a regular basis by huge corporate failures that are partially due to corporate governance failures, as can be seen from the case studies of Steinhoff, Tongaat and Tiger Brands. The case studies on Honda and Volkswagen indicate that this is not only a South-African phenomenon, but also a global occurrence. This strengthens the possible conclusion, that despite the fact that organisations declare compliance with corporate governance principles, the disclosure thereof might be dealt with as a “tick-box” exercise to adhere to listing requirements, and is not seen as pivotal and integral to every critical aspect of value creation as envisaged by King IV.

This study confirms to the JSE that JSE-listed companies tend to disclose compliance with the principles of good corporate governance as stated in King IV. These findings also confirm to IoDSA that the fewer principles of the latest King Report enhanced the adherence to the disclosure requirements of King IV; however, none of this seems to prevent corporate failures that can partially be attributed to ineffective corporate governance practices. This study is limited by the fact that King IV only became effective for years ending after 1 April 2017 and relevant scientific publications are still limited. Further studies may investigate a possible relationship between specific governance disclosures, or the lack there-of, and corporate failures.

With the enhanced focus of King IV on disclosure, it is recommended that a uniform framework should be developed which give clear application guidelines on what practices should be in place, before an entity can claim full compliance with King IV. Until corporate governance is not considered to be a crucial part of the success of an entity, catastrophic business failures may remain a never-ending reality. Future research will be done on the compliance to and disclosure of specific governance practices that could enhance the effectiveness of corporate governance in entities.

REFERENCES

- Abor, J., and Adjasi, C. K. (2007). Corporate governance and the small and medium enterprises sector: theory and implications. *Corporate governance*, 7(2), 111-122.
- Bachmann, R., Ehrlich, G., Fan, Y. & Ruzic, D. (2019). Firms and collective reputation: a study of the Volkswagen emissions scandal. Working paper 26117,

National Bureau of economic research, Cambridge. <http://www.nber.org/papers/>. Accessed 2019/08/28.

Business Tech. (2017). *The Biggest Companies in South Africa by Market Cap*. <https://businesstech.co.za/news/business//164635/the-biggest-companies-in-south-africa-by-market-cap/>. Accessed 2019/08/27.

Canter, A. (2018). SA counts costs of poor governance. *Mail and guardian*. <https://mg.co.za/article/2018-03-02-00-sa-counts-cost-of-poor-governance>. Accessed 2019/07/21.

Department of Health, Republic of South Africa, (2018). Listeriosis outbreak emergency response plan, <http://www.health.gov.za/index.php/component/phocadownload/category/439>. Accessed 2019/07/21.

Hunter-Adams, J., Battersby, J. and Oni, T. (2018) Fault lines in food system governance exposed: reflections from the listeria outbreak in South Africa, *Cities & Health*, 2:1, 17-21.

IFC, (2013). Corporate Governance. Key Highlights of 2013. <https://www.ifc.org/wps/wcm/connect/b9d57f80437ee53f8d60bd869243d457/CG+Key+Highlights+2013.pdf?MOD=AJPERES>. Accessed on 6.7.2019.

Investor-Words, (2008). *Market Capitalization: Definition*. Retrieved from http://www.investorwords.com/2969/market_capitalization.html. Accessed 2019/07/06.

IODSA (Institute of Directors in Southern Africa). (2002). *Executive summary of the King report 2002*. <https://bit.ly/2IzVogm>. Accessed 2019/07/18.

IODSA (Institute of Directors in Southern Africa). (2002). *King Report on corporate governance for South Africa 2002*. http://library.ufs.ac.za/dl/userfiles/documents/Information_Resources/KingII%20Final%20doc.pdf. Accessed 2019/07/06.

IODSA (Institute of Directors in Southern Africa). (2009), *King report on corporate governance for South Africa 2009*, http://c.ymcdn.com/sites/www.iodsa.co.za/resource/resmgr/king_iii/King_Report_on_Governance_fo.pdf. Accessed 2019/07/06.

IODSA (Institute of Directors in Southern Africa). (2016), *Report on corporate governance for South Africa 2016*, <https://c.ymcdn.com/sites/iodsa.site-ym.com/resource/collection/684B68A7-B768-465C-8214->

E3A007F15A5A/IoDSA_King_IV_Report_-_WebVersion.pdf. Accessed 2019/07/06.

IODSA (institute of Directors in Southern Africa). (2018), Understanding King IV and what it is intended to achieve, <https://www.iodsa.co.za/news/389613/Understanding-King-IV-and-what-it-is-intended-to-achieve.htm>. Accessed 2019/07/05.

JSE. (2011). JSE Limited listing requirements. [https://www.jse.co.za/content/JSEAnnouncementItems/Service%20Issue%2014\(2\).pdf](https://www.jse.co.za/content/JSEAnnouncementItems/Service%20Issue%2014(2).pdf). Accessed 2019/07/15.

JSE. (2017). Amendments to the JSE Limited listing requirements: Part 1 of 2016. <https://www.jse.co.za/content/JSEAnnouncementItems/20170522-JSE%20Letter%20Implementation%20May%202017.pdf> . Accessed 2019/07/19.

Kirkpatrick, G. (2009). The Corporate governance lessons from the financial crisis. *Financial Market trends* – ISSN 199 – 2864, Vol. 2009/1.

Konstans, C., Radhakrishnan, S., Switzer, C.S & Williams, L.C. (2011). In Search of 'Principled' Performance. (cover story). *Financial Executive*, 27(10), 55-57.

Khoo, S.S. (2019). "Tobin's Q of Honda Motor Company, Limited and its Determinants from 2013 to 2017," MPRA Paper 93879, University Library of Munich, Germany. <https://mpra.ub.uni-muenchen.de/93879/>. Accessed 2019/08/27.

Madigan, V. (2018). The importance of diversity of perspective on boards. <http://www.mondaq.com/ireland/x/694462/Corporate+Governance/The+Importance+of+Diversity+of+Perspective+on+Boards>. Accessed 2019/07/15.

Manganye, D. (2019) What happens when the board fails the business? <https://www.itweb.co.za/content/PmxVEMKXRDPqQY85>. Accessed 2019/07/19.

Matussek, K. (2018) VW fights investors as diesel-scandal cost could top \$35bn. Business report, 10/9/2019. <https://www.iol.co.za/business-report/international/vw-fights-investors-as-diesel-scandal-cost-could-top-35bn-16977770>. Accessed 2019/08/28.

Modiha, E. 2018. Identifying the challenges to implement King IV in Chapter 9 and public sector institutions. North-West University. (Mini-dissertation – MBA).

Natesan, P and Du Plessis, P. (2019). Why King IV's "apply and explain" is so important. Institute of Directors of South Africa. <https://www.iodsa.co.za/news/438882/Why-King-IVs-apply-and-explain-is-so-important.htm> Accessed 2019/07/19

Naudé, P., Hamilton, B., Ungerer, M., Malan, D. and De Klerk, M. (2018). Business perspectives of the Steinhoff saga. *University of Stellenbosch business school, special report June 2018*. https://www.usb.ac.za/usb_reports/steinhoff-saga/. Accessed 2019/07/21.

OECD (Organisation for Economic Co-operation and Development), (2014), Risk Management and Corporate Governance, Corporate Governance, OECD. Publishing. <http://www.oecd.org/daf/ca/risk-management-corporate-governance.pdf> .Accessed 2019/07/04.

OECD (Organisation for Economic Co-operation and Development), (2017). Improving business behaviour: Why we need corporate governance, OECD, <http://www.oecd.org/daf/ca/corporategovernanceprinciples/improvingbusinessbehaviourwhyweneedcorporategovernance.htm>. Accessed 2019/07/04.

PWC, (2016). King IV Steering point – A summary of the King IV report on corporate governance in South Africa. <https://www.pwc.co.za/en/publications/king4.html>. Accessed 2019/07/20.

Rossouw, J. and Styan, J. (2019). Steinhoff collapse: a failure of corporate governance. *International review of applied economics*. 33(1), 163-170.

SAICA, (2013). King Report on Corporate Governance. <https://www.saica.co.za/Technical/LegalandGovernance/King/tabid/2938/language/en-ZA/Default.aspx> . Accessed 2019/07/05.

SHARENET, (July 2019) Top 100 JSE listed companies by market capital. <http://www.sharenet.co.za/index.phtml?content=/free/topco.phtml>. Accessed 2019/07/05.

Steinhoff, (2016), *Annual report 2016 - Steinhoff International Holdings N.V.*, 28

Swart, JJ. 2018. Audit Methodologies: Developing an integrated planning model incorporating audit materiality, risk and sampling. Vanderbijlpark: NWU. (Thesis - PhD).

Tiger Brands, (2017), *Tiger Brands Integrated Annual report 2017*, 70-82. <http://www.tigerbrands-online.co.za/reports/ir-2017/downloads.php>. Accessed 2019/07/21.

Tongaat, (2019), SENS Tongaat Hulett's, <http://www.tongaat.com/investors/sens/>. Accessed 2019/07/21.

Van Vuuren, Janse H. H. (2006). *Disclosing risk management policies in financial statements* (Masters Dissertation, North-West University, Vanderbijlpark).

Van Vuuren, Janse H. H. (2016). Risk management disclosure practices in accordance with King II and King III: The case of selected JSE listed companies. *International Journal of Economics and Finance studies*. 8(1), 159-174, ISSN:1309-8055 (Online).

ECONOMIC GLOBALISATION AND GOVERNMENT SIZE: TESTING THE COMPENSATION HYPOTHESIS IN SOUTH AFRICA'S PUBLIC SECTOR

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—Abstract —

Globalisation has become one of the most profound processes to influence both developed and developing regions. No more so has this been evident than in the South African economy. The country's democratic transition attributed the adoption of a less protectionist and liberal economic orthodoxy aimed to facilitate social and economic development. While the introduction of trade agreements and an influx of FDI has contributed to enhanced infrastructure, the impact of globalisation on the role of the state has raised several questions. Some suggest that economic globalisation spurs on fiscal growth by increasing social expenditure (compensation hypothesis). Others theorise that mobile capital in a more competitive financial environment has limited the role of the state (efficiency hypothesis). In light of this debate and concerns of unsustainable fiscal growth in South Africa, the study's primary objective was to analyse the relationship between economic globalisation, social expenditure and tax revenue in the South African economy. Secondary annual time series data from 1995 to 2018 were used. Two ARDL models were employed to test the long-run relationships, while the ECM assisted in estimating the short-run dynamics. Results for both the short- and long-run together with the causality analysis provide evidence that refutes the notion that a more integrated South African economy induces external shocks. The findings rather support the efficiency view. In this regard, competitive financial markets coupled with a high tax burden and fiscal debt concerns have reduced the state's revenue capacity, limiting the potential to further social development. In addressing these concerns, government needs to proliferate strategies that advance fiscal consolidation and policy certainty, and implement structural reforms that facilitate inclusive growth.

Key Words: *ARDL, globalisation, public sector, South Africa, social development*

JEL Classification: F6; H1; H5.

1. INTRODUCTION

Over the last two decades, countries around the globe have shown strong interdependencies across various dimensions, including political, social and economic spheres (Gygli *et al.*, 2019). From sharing cultural values, the emergence of political alliances and the presence of cross border capital flows, globalisation has had an incredible impact on most countries' objective of promoting a decent standard of living. Earliest proponents of the process promoted the notion that a more connected world would benefit nations, allowing greater efficiency in production practices, enhanced flows of information and the promotion of technological innovation (Stiglitz, 2003). However, as time has progressed, many have come to consider the negative effects of the process (Potrafke, 2018). Critics have pointed to the fact that while for some countries these advantages are realised, many have been exposed to turbulence in the global economy, instilling significant amounts of uncertainty and volatility in various aspects. Among these, the relationship between economic globalisation and public sector composition has been universal and highly contested (Gözzgör *et al.*, 2019).

From these perspectives, two schools of thought have emerged, which have described the dynamics of this relationship. Among the supporters of the first, it is believed that increased participation in trade and financial liberalisation induces external shocks that increase the need for social expenditure, consequently promoting governments' role in the economy (Rodrik, 1998). The second, contrastingly, theorises that higher levels of international economic integration allow for greater capital mobility. Through this, public sector size is reduced by imposing tax constraints and enforcing productive expenditure in order to attract foreign direct investment (FDI) (Mishra, 1999). While studies across different countries have shown mixed support in these views, the South African case poses an intricate situation. Where the apartheid regime was largely characterised by protectionist economic agendas, the democratic transition attributed the adoption of a liberal economic orthodoxy aimed at facilitating economic development (Carmody, 2012). Globalisation in this regard was primarily an internally-driven occurrence, significantly differing from most other nations (Sebake, 2017).

Based on these ambiguities and the current concerns pertaining to significantly high fiscal debt and the sustainability of the welfare state, the study seeks to add

to the limited knowledge surrounding this relationship in South African. In doing so, it seeks to test the compensation and efficiency hypotheses in explaining the dynamics between economic globalisation and public sector composition. The sections that follow pertain a literature review where after the methodology is explained. Subsequent to this, the study discusses the results and concludes with a discussion on the various implications on the matter at hand.

2. LITERATURE REVIEW

2.1. Conceptualisation of economic globalisation

As a concept, globalisation has attracted a significant amount of interest. From the earliest of conceptualisations, the process of a more interconnected world was predominantly viewed as the increase in the multinational character of businesses and organisations (Al-Rodhan & Stoudmann, 2006). Proponents of these views ensued that a globalised world mainly entailed the emergence of intercontinental trade, which was brought about through, arguably, processes of colonialism and the geographic discoveries during the start of the Afroeurasian world system (Katona *et al.*, 2013). As time has progressed, however, these conceptualisations have largely been augmented. This has come based on the realisation that globalisation cannot be viewed as a single concept nor that it can be understood under a specific timeframe (Pannilage, 2017). Rather, based on the developments after colonialisation, including the emergence of capitalist economic systems and various contemporary cross-border political alliances, globalisation has come to be understood over a multitude of disciplines (Deiningner, 2014).

In light of the multidimensionality of the process, the comprehension of globalisation has been difficult. Larsson (2001:9) explains it from a geographical and logistical perspective as “*a process of world shrinkage, of distances getting shorter and things moving closer*”. While, from more social disciplines, globalisation is viewed in the manner in which family life and community dynamics have been changed through the inclusion or exclusion of individuals in a more connected society (Grębosz & Hak, 2015). Despite these different understandings, most accepted definitions have primarily referred to the process as “*a gradual integration of economies and societies driven by technologies, new economic relationships and the policies of a wide range of actors, including governments, international organizations, labour and society*” (Gunter & van der Hoeven, 2004:7). Based on these understandings, the discourse surrounding the process has compartmentalised globalisation in three distinct dimensions. These

include economic, cultural and political spheres, all of which have played a significant role in structuring global socio-economic activities (Deininger, 2014).

2.2. Complexities and benefits of economic globalisation

Taking into regard the different dimensions, the impact that globalisation has had specifically on the development of economies around the globe has been unprecedented. Grębosz and Hak (2015) refer to the advantages the process has afforded many countries including the diffusion of technology, enhanced factor productivity and the augmentation of capital. Moreover, it is believed that countries have benefitted through enhanced knowledge transfers as well as positive trade participation (Eugster *et al.*, 2018). While these proponents have expressed the benefits of a connected world, some have reiterated that the advantages have not been realised by all. In fact, scholars have expressed the fact that globalisation has impeded development primarily in countries with weak institutions and political instability (Amavilah *et al.*, 2017). From these views, a more global society has hampered domestic economic activity through the increased possibility of environmental degradation, the exacerbation of structural inequality and increased poverty levels (Kishan, 2018). These complexities have primarily been due to the inability of governments to keep pace with volatile conditions and maintain support across a broad base of their populations.

Inherent in this has been the dynamics between the economic dimension of globalisation and the role that public sectors play in the economy. Here, the intensification of a country's international economic exchanges through the flow of goods and capital and the relaxation of certain regulatory practices in trade agreements pose several implications for governments (Kim & Zurlo, 2009). These have been expressed in two competing hypotheses. The first posits that economic globalisation induces the need for a larger public sector. This school of thought, *the compensation hypothesis*, suggests that when economies are more "open", they are subject to greater volatility (Rodrik, 1998). This consequently induces more economic insecurity in domestic markets, either in the form of a higher likelihood of cyclical unemployment or lower income levels, both prompting demand for social welfare policies (Koster, 2009).

Contrary to the above, *the efficiency hypothesis* postulates that economic globalisation and public sector size exhibit an inverse relationship (Blackmon, 2006). This view asserts that the globalisation of economic activity induces pressure on the autonomy of government and their instrumental capacity. From this perspective, more competitive financial markets are said to increase the

mobility of capital (OECD, 2017). Countries with comparatively high corporate and income tax rates tend to be less competitive than those with lower rates. As a result, these countries experience a greater likelihood of capital flight and with it added strain on generating the needed tax revenue. In addition, Potrafke (2018) explains that the heightened competition is usually followed by governments responding through reducing tax rates that would result in what has come to be known as the “*race to the bottom*” and with it a more austere fiscal policy.

2.3. Evidence from South Africa and other developing countries

While research in this regard has shown mixed results, the relationship between globalisation and public sectors holds significant relevance, especially within the South African context. Showcasing a somewhat unique internal adoption of the globalisation process, fiscal policy has played a pivotal role in promoting social development (Donaldson, 2018). In fact, since 1994, government’s social expenditure has averaged at around four per cent of its gross domestic product (GDP), somewhat higher than similar developing countries such as Jamaica (1%) and Argentina (1.5%) (Mtantato & Ngozo, 2018). Moreover, in addressing the irregularities of the past, it has established one of the most comprehensive social grant systems in the developing world, where more than 33 per cent of the population are beneficiaries (Fanta *et al.*, 2017). Despite this, the country has likewise had to contend with the significant waves of globalisation since its transition to democracy. Being regarded as only a moderate globaliser, the economy has had to manage a volatile exchange rate, significant fluctuations in FDI inflows together with a poor current account performance (Ngondo & Khobai, 2018). The process, however, has also attributed an advantageous regional integration with participation in various custom unions. This has been coupled with the involvement in a range of cross-continental trade agreements both with the European Union and the USA, proving beneficial for trade competitiveness (Chideme, 2016). Nevertheless, concerns surrounding the level of economic integration and its relationship with the government’s objectives have become significant. This has largely come as a result of the emergence of unsustainable levels of fiscal debt, mounting pressure on tax revenue as well as the sustainability of social welfare programmes (Bond & Malikane, 2019).

In light of the inherent complexities, various studies have aimed to shed light on the compensation-efficiency debate. From a developed context, results have been somewhat mixed. Garret and Mitchell (2001), in their study, employed a dynamic time-series cross-section model of 19 OECD countries from 1973 to 1997,

showing a negative relationship between FDI inflows, capital liberalisation and public social expenditure. However, in their study, through the use of a panel of G7 countries between 1980 and 2015, Bayat *et al.* (2017) showed a positive relationship between trade openness and government expenditure. Additionally, from a more qualitative perspective, through the use of an open methods of coordination method, Lammers *et al.* (2018) show evidence supporting the positive relationship describing how the global financial crisis and strong integrated financial markets played a significant role in establishing contemporary EU social policy. Evidence for developing countries, however, has mainly supported the efficiency hypothesis. Kaufman and Segura-Ubierno (2001), in this regard, for 14 Latin American countries, through the use of dynamic time series modelling, showed a negative relationship. Likewise, in their panel study of 92 developing countries across Africa, Latin America, the Middle East and Europe, Gözgör *et al.* (2019) show support for the efficiency hypothesis. These results were also confirmed by Olawole and Adebayo (2017) for Nigeria, in which the study confirmed that heightened capital mobility undermines fiscal policy's ability to raise tax revenue, reducing and redirecting expenditure.

3. RESEARCH METHODOLOGY

The study had the primary objective of analysing the relationship between economic globalisation levels, social expenditure and tax revenue in South Africa. A quantitative research approach through the use of an econometric time series analysis was used together with an adoption of a functionalist paradigmatic view.

3.1. Data and sample period

The econometric time series analysis made use of secondary data ranging from 1995 to 2018. Included variables comprised real public sector social expenditure, tax revenue as a percentage of GDP and economic globalisation levels measured through the KOF Swiss Economic Institute's economic globalisation index. The latter consists of a combination of 15 *de facto* and *de jure* trade and finance variables, which are all weighted according to a time-varying principal component analysis. Following suit with similar studies (Gözgör *et al.*, 2019), population size, the real effective exchange rate, and consumer price inflation were included as control variables for country size and macroeconomic stability. Variables were transformed to their natural logarithm. Table 1 provides an overview of the included variables and the databases from which data were collected.

Table 1: Variable description and data source identification

Variable	Measure	Data base
Tax revenue (TAX)	Tax as % of GDP	Quantec
Social expenditure (SE)	Real public sector social expenditure (R) as % of GDP	Quantec
Consumer price inflation (CPI)	CPI index	SARB
Real effective exchange rate (EXCH)	Real effective exchange rate index	SARB
Economic globalisation (ECG)	KOF globalisation index ranging from 0 – 100. A higher score indicates higher levels of economic globalisation.	KOF Swiss Economic Institute
Population size (PS)	Number of individuals	Quantec

3.2. Model description

The analysis made use of the autoregressive distributed lag (ARDL) model refined by Pesaran *et al.* (2001). The motivation for the model’s selection is based on its ability to be utilised when variables are not integrated of a similar order – an advantage it holds over similar econometric techniques. The latter requires all variables to be integrated at first order. The ARDL model, however, can be estimated when variables are stationary at I(0), I(1) or even presents a mixture of these variables. The model likewise has shown to provide robust and accurate results when used with smaller sample sizes. For the purpose of accurately achieving the objective of the study, two models were employed:

$$\Delta LSE = \varphi_0 + \sum_{j=1}^k \eta_j \Delta LSE_{t-j} + \sum_{j=1}^k \alpha_j \Delta LECG_{t-j} + \sum_{j=1}^k \beta_j \Delta LCPI_{t-j} + \sum_{j=1}^k \gamma_j \Delta LEXCH_{t-j} + \sum_{j=1}^k \delta_j \Delta LPS_{t-j} + \omega_1 \Delta LSE_{t-1} + \omega_2 \Delta LEG_{t-1} + \omega_3 \Delta LCPI_{t-1} + \omega_4 \Delta LEXCH_{t-1} + \omega_5 \Delta LPS_{t-1} + \mu_t \dots \dots \dots (1)$$

$$\Delta TAX = \varphi_0 + \sum_{j=1}^k \eta_j \Delta TAX_{t-j} + \sum_{j=1}^k \alpha_j \Delta LECG_{t-j} + \sum_{j=1}^k \beta_j \Delta LCPI_{t-j} + \sum_{j=1}^k \gamma_j \Delta LEXCH_{t-j} + \sum_{j=1}^k \delta_j \Delta LPS_{t-j} + \omega_1 \Delta TAX_{t-1} + \omega_2 \Delta LEG_{t-1} + \omega_3 \Delta LCPI_{t-1} + \omega_4 \Delta LEXCH_{t-1} + \omega_5 \Delta LPS_{t-1} + \mu_t \dots \dots \dots (2)$$

where ΔLSE refers to the change in the natural logarithm of public sector expenditure, $\Delta LECG$ the change in the natural logarithm of economic globalisation levels, $\Delta LCPI$ the change in the natural logarithm of consumer price inflation, $\Delta LEXCH$ the change in the natural logarithm of the real effective exchange rate, ΔLPS the change in the natural logarithm of the population size

and u_t the error term. The short-run coefficients are presented by $\eta_j, \alpha_j, \beta_j, \gamma_j, \delta_j$ while k showcases the number of lags included in both models. Furthermore, the long-run coefficients are expressed by $\omega_1, \omega_2 \dots \omega_n$. Following equations 1 and 2 as shown above, the study formulates the following hypotheses:

Null hypothesis (H_0): No co-integration between the variables

Alternative hypothesis (H_1): Presence of co-integration between the variables

With the purpose of testing these hypotheses, a bounds testing procedure is undertaken in which a calculated F-statistic is compared to lower- and upper-bound critical values as established by Pesaran *et al.* (2001). If the calculated F-statistic is found to exceed the critical values, the null hypothesis (indicating the absence of co-integrating variables) can be rejected in favour of the alternative hypothesis. However, if the calculated F-statistic is found to be lower than both these values, then the null hypothesis cannot be rejected. Subsequent to this process, and on the condition that the null hypothesis is, in fact, rejected, an error correction model (ECM) must be estimated with the purpose of determining the speed of adjustment back to equilibrium, while likewise determining the short-run dynamics between the variables. For this purpose, the models that are used can be expressed as follows:

$$\Delta LSE = \varphi_0 + \sum_{j=1}^k \eta_j \Delta LSE_{t-j} + \sum_{j=1}^k \alpha_j \Delta LECC_{t-j} + \sum_{j=1}^k \beta_j \Delta LCPI_{t-j} + \sum_{j=1}^k \gamma_j \Delta LEXCH_{t-j} + \sum_{j=1}^k \delta_j \Delta LPS_{t-j} + \theta ECT_{t-1} + \mu_t \dots \dots \dots (3)$$

$$\Delta LTAX = \varphi_0 + \sum_{j=1}^k \eta_j \Delta LTAX_{t-j} + \sum_{j=1}^k \alpha_j \Delta LECC_{t-j} + \sum_{j=1}^k \beta_j \Delta LCPI_{t-j} + \sum_{j=1}^k \gamma_j \Delta LEXCH_{t-j} + \sum_{j=1}^k \delta_j \Delta LPS_{t-j} + \theta ECT_{t-1} + \mu_t \dots \dots \dots (4)$$

For both these equations, ECT_{t-1} denotes the error correction term and θ signifies the coefficient of the error correction term. The latter is utilised in order to measure the speed of adjustment back to equilibrium. Finally, with the purpose of determining the presence of any causal relationships between the variables, the study applied the Toda-Yamamoto Granger causality test. This approach employs a block exogeneity Wald test in an augmented VAR model. The model is estimated regardless of the order of integration of the variables and estimated with a lag order of $(k + dmax)$, where d indicates the maximum potential lag order and k the true lag order. The model tests whether the included variables' coefficients'

lagged values are equal to zero (presence of causality). If it is found that these values are not equal to zero, however, it signifies the absence of causality.

4. RESULTS AND DISCUSSION

4.1. Correlation analysis

As part of the descriptive inquiry, the study employed correlation analysis in order to determine the nature and strength of the relationship between the variables. Table 2 shows the results of the analysis. Here, social expenditure attributed strong positive associations with both population size and consumer price levels, while only a positive medium relationship seems to exist with economic globalisation. On the other hand, tax revenue levels attribute significant and positive associations with population size as well as consumer price levels, somewhat confirming *a priori* expectations. While these relationships exuded strong positive associations, economic globalisation and social spending as well as tax revenue, contrastingly, showcased medium and low negative associations.

Table 2: Correlation results among the selected variables

Probability	LSE	LTAX	LECG	LPS	LEXCH	LCPI
LSE	1.00000 -----					
LTAX	0.52640 (0.0118)**	1.00000 -----				
LECG	-0.24791 (0.2660)	-0.48794 (0.0212)**	1.00000 -----			
LPS	0.79031 (0.0000)*	0.78169 (0.0000)*	0.70659 (0.0002)*	1.00000 -----		
LEXCH	-0.22989 (0.3034)	-0.07461 (0.7414)	-0.58723 (0.0041)*	-0.40807 (0.0594)***	1.00000 -----	
LCPI	0.78374 (0.0000)*	0.76408 (0.0000)*	0.73196 (0.0001)*	0.99281 (0.0000)*	-0.47261 (0.0263)**	1.00000 -----

Note: () shows p-values, * significance at 1% level; ** 5% level; *** 10% level of significance

4.2. Unit root analysis

Following the correlation analysis, the study made use of the augmented Dickey-Fuller (ADF) unit root test in order to determine the selected variables' order of integration. While ARDL models can be used with either I(0) or I(1) variables, the use of variables that are integrated at the second order will render the computed F-statistics of the bounds testing procedure invalid. Table 3 reports the results of the unit root test that was applied. Based on these estimates, among the six selected variables, four (*LPS*, *LEXCH*, *LCPI* & *LTAX*) variables were integrated at the first order, while only *LSE* and *LECG* were stationary at level.

Table 3: Augmented Dickey-Fuller (ADF) unit root test results

Variable	Levels		1 st difference				I(0)/ I(1)		
	Intercept	Trend & intercept	Intercept	Trend & intercept	Intercept	Trend & intercept			
LSE	-0.673	0.8281	-3.180	0.1162	-6.793	0.0002*	-3.769	0.0126**	I(1)
LTAX	-1.489	0.5193	-3.082	0.1367	-3.484	0.0197**	-3.386	0.0816***	I(1)
LECG	-5.013	0.0008*	-3.694	0.0468**	-2.901	0.0630***	-3.971	0.0279**	I(0)
LPS	-1.454	0.5360	-0.317	0.9841	-4.168	0.0047*	-6.793	0.0002*	I(1)
LEXCH	-2.289	0.1846	-2.565	0.2973	-4.019	0.0064*	-3.903	0.0317**	I(1)
LCPI	-1.174	0.6650	-2.704	0.2451	-3.306	0.0291**	-3.518	0.0660***	I(1)

*Note: * denotes significance at 1% level; ** 5% level; *** 10% level of significance*

4.3. Bounds testing and long-run analysis

Testing whether a more integrated South African economy ascribed to movements of the compensation or efficiency hypothesis, the study employed two models. The first model made use of social expenditure as the dependent variable. In conjunction with this, and with the purpose to enhance the robustness of the results, the second model used tax revenue levels as the dependent variable. Automatic lag selection was used by means of the SBIC information criterion to select the models. Based on this, the two models were estimated as ARDL 1 (1,2,1,2,2) and ARDL 2 (1,2,2,0,1). Thereafter, bounds testing was carried out in order to estimate the long-run relationships. Results for these tests are reported in Table 4. The estimated F-statistics for Model 1 were calculated at 7.372 and 5.031 for Model 2. Both values exceeded the critical values, which inferred the presence of co-integration and the existence of the long-run relationships.

Table 4: Bounds test results for both selected models

Model	Estimated F-value	Pearson critical values			Presence of co- integration
		Sig. level	Lower bound	Upper bound	
<i>Model 1</i> <i>DV: LSE</i>	7.37221	10%	2.45	3.52	Co-integration confirmed
		5%	2.86	4.01	
		2.5%	3.25	4.49	
		1%	3.74	5.06	
<i>Model 2</i> <i>DV: LTAX</i>	5.03163	10%	2.45	3.52	Co-integration confirmed
		5%	2.86	4.01	
		2.5%	3.25	4.49	
		1%	3.74	5.06	

Results shown in Table 5 depict the coefficients for the long-run relationships. As shown, from Model 1, the coefficients for LECG were estimated at -0.375, which infers a negative relationship between economic globalisation and social expenditure patterns. In other words, this implies that if the economic globalisation levels increase by 1 per cent, it would infer a 0.374 per cent decline in social expenditure. In support of these findings, results for Model 2 likewise showed a statistically significant ($p\text{-value} = 0.0465$) negative relationship between LECG and LTAX. From this, it infers that a more globally integrated South African economy induces pressure on fiscal policy to attract tax revenue. Kim and Zurlo (2009) explain that induced global competition towards enticing more mobile capital limits the capacity of governments to obtain the necessary funding, especially when local tax conditions are not conducive. This then holds various consequences for the welfare state, given that limited spending is directed more towards restraining the loss of capital and away from social objectives.

Table 5: Long-run coefficients

Model	Variables	Coefficient	Std. error	t-statistic	Prob.
<i>Model 1</i> (1,2,1,2,2) DV: LSE	LECG	-0.374151	0.068700	-5.446163	0.0010*
	LPS	0.148431	0.285443	0.520002	0.6191
	LEXCH	0.042412	0.179456	0.236336	0.8199
	LCPI	0.166325	0.151973	1.094437	0.3100
	C	2.064346	0.601341	3.432901	0.0109*
<i>Model 2</i> (1,2,2,0,1) DV: LTAX	LECG	-0.131418	0.070483	-2.218698	0.0465**
	LPS	-0.526277	0.317314	-1.658539	0.1316
	LEXCH	0.130010	0.162298	0.801060	0.4437
	LCPI	0.370448	0.174933	2.117660	0.0633***
	C	2.388464	0.546741	4.368551	0.0018*

Note: * denotes significance at 1% level; ** 5% level; *** 10% level of significance

4.4. ECM and short-run analysis

After confirming the presence of co-integration among the variables, an ECM model was estimated with the purpose to determine the speed of adjustment back to equilibrium. Table 6 illustrates the results for both the models. It specifically showcases the short-run coefficients as well as the error correction terms. The latter for both models was negative and statistically significant, which confirms error correction in the two co-integrating relationships. Additionally, the ECT coefficient for Model 1 (-0.5684) suggests that, for each year, 56.84 per cent of the distortions to equilibrium in social expenditure are eliminated. In comparison, results for Model 2 (ECT coeff. = -0.8132) suggest a slightly more rapid return to equilibrium, taking approximately 1.23 years to eliminate distortions in tax revenue levels.

Based on the short-run coefficients depicted in Table 6, the results seem to correspond with those reported for the long run. Social expenditure and tax revenue seem to be negatively affected by aspects such as more openness to trade, the country's participation in various trade agreements as well as the ability to hold diversified international investment portfolios. These results lend credence to the efficiency hypothesis within the South African public sector, supporting the results of similar studies conducted within more developing contexts (Gözzgör *et al.*, 2019). Finally, upon viewing the results between the various chosen control

and dependent variables, estimates provide evidence that confirms expected relationships. For instance, results show that population size affects social expenditure positively (Borcherding, 1977), while both higher inflation levels and a depreciation in the real effective exchange rate increase tax revenue collection (Friedman, 1941).

Table 6: ECM results and short-run coefficients

Model	Variables	Coefficient	Std. error	t-statistic	Prob.
<i>Model</i> <i>(1,2,1,2,2)</i> <i>DV: LSE</i>	D(LECG)	-0.145632	0.083406	-3.442269	0.0074*
	D(LECG(-1))	0.150899	0.066043	2.284854	0.0562***
	D(LPS)	0.422211	0.188542	2.239352	0.0601***
	D(LEXCH)	0.010180	0.061926	0.164396	0.8741
	D(LEXCH(-1))	-0.103567	0.071822	-1.441988	0.1925
	D(LCPI)	-0.100782	0.074591	-1.351132	0.2187
	D(LCPI(-1))	-0.267632	0.101441	-2.638307	0.0335**
	CointEq(-1)	-0.568471	0.195194	-2.912333	0.0226**
<i>Model</i> <i>(1,2,2,0,1)</i> <i>DV: LTAX</i>	D(LECG)	-0.216281	0.139287	-4.697591	0.0015*
	D(LECG(-1))	-0.105609	0.070178	-1.504872	0.1666
	D(LPS)	0.165340	0.371702	0.444819	0.6670
	D(LPS(-1))	0.431496	0.213365	2.022341	0.0738***
	D(LEXCH)	-0.105728	0.111398	-0.949103	0.3674
	D(LCPI)	0.549784	0.159716	2.081628	0.0825*
	CointEq(-1)	-0.813228	0.258786	-3.142473	0.0119*

Note: * denotes significance at 1% level; ** 5% level; *** 10% level of significance

4.5. Toda-Yamamoto Granger causality analysis

In instances where there is a presence of co-integration among the variables, it suggests the existence of at least one causal relationship (Granger, 1988). Therefore, the study ensued with causality analysis making use of the Toda-Yamamoto Granger approach for which results are shown in Table 7. As depicted, LECG and LSE seem to exhibit a bidirectional relationship, as do LTAX and LECG. While this confirms that economic globalisation causes changes in social expenditure levels as well as those attributed in taxation levels, it also suggests

both to impact the *de facto* and *de jure* changes regarding the South African economy's global integration.

In addition to this, results from Table 7 furthermore confirm a one-directional causal relationship emanating from LPS, LEXCH and LCPI toward LECG. Here, changes in population figures as well as exchange rate fluctuations have an effect not only on the trade of goods and services, but likewise decisions regarding the participation in trade agreements and investment restrictions. These interdependencies, according to Bostan *et al.* (2018), can largely be ascribed to countries' objective to maintain competitiveness in expanded financial markets. From this point of view, fluctuations in prices and currency valuations tend to influence decisions within the trade environment. Specifically, where changes are rapid, export-import performance is affected. However, if these fluctuations are sustained, policymakers seek to implement new policies (Kang & Dagli, 2018).

Table 7: Toda-Yamamoto Granger causality results

Variable	<i>Dependent variables</i>					
	LSE	LPS	LEXCH	LECG	LCPI	LTAX
LSE	-----	0.86737 (0.6481)	1.66771 (0.4344)	43.0122 (0.0000*)	11.4449 (0.0033*)	16.2369 (0.0003*)
LPS	0.94924 (0.6221)	-----	0.47622 (0.7881)	19.6059 (0.0001*)	0.61010 (0.7371)	7.27739 (0.0263*)
LEXCH	0.27954 (0.8696)	0.89116 (0.6405)	-----	5.19625 (0.0744***)	0.639607 (0.7263)	9.40779 (0.0091*)
LECG	6.55616 (0.0377**)	2.36539 (0.3065)	0.44437 (0.8008)	-----	2.64385 (0.2666)	6.61475 (0.0366**)
LCPI	0.89508 (0.6392)	1.59944 (0.4495)	0.88278 (0.6431)	37.4481 (0.0000*)	-----	3.12398 (0.2097)
LTAX	2.26601 (0.3221)	2.09722 (0.3504)	0.14496 (0.9301)	20.2647 (0.0000*)	0.34247 (0.8426)	-----

Note: () shows p-value; * significance at 1% level; ** 5% level; *** 10% level of significance

4.6. Diagnostic and stability tests

As the final step in the analysis, the study employed various diagnostic tests with the purpose of analysing the robustness of the short-run estimates. In doing so, tests for normality, heteroscedasticity as well as autocorrelation were utilised for which results are reported in Table 8. Based on these estimates, residuals for both the used models were normally distributed, homoscedastic and no serial correlation was present. In addition to these diagnostics, results pertaining Ramsey’s RESET test confirmed the aptness of the models’ functional form.

Table 8: Residual diagnostics and model stability results

Item	Test	<i>Model 1 (1,1,2,2,2)</i>		<i>Model 2 (1,0,2,2,1)</i>	
		<i>p-value</i>	Result	<i>p-value</i>	Result
Normality	Jarque-Bera	0.8894	Normally distributed	0.5367	Normally distributed
Heteroscedasticity	Breusch-Godfrey-Pagan	0.5227	Homoscedastic	0.9012	Homoscedastic
Serial correlation	Breusch-Godfrey	0.3251	No serial correlation	0.8753	No serial correlation
Model specification	Ramsey RESET test	0.2845	Functional form correct	0.3321	Functional form correct

5. CONCLUSION AND RECOMMENDATIONS

The primary objective of the study was to analyse the relationship between the level of economic globalisation, social expenditure and tax revenue within the South African economy. In doing so, the study aimed to test the compensation and efficiency hypotheses which aim to explain the dynamics between economic globalisation and government size. Results in this regard seem to lend credence to the efficiency hypothesis in South Africa. While economic globalisation has brought with it various advantages, it does hold important fiscal implications. Among the most telling of these has been the consequences that competitive international capital markets coupled with a high tax burden have induced. Higher capital mobility has seen large outflows that have consequently increased pressure on tax revenue. For the South African economy, characterised with a large welfare state, this raises various concerns. Not only does economic globalisation impact fiscal income, but it likewise plays a major role in expenditure objectives.

With all of this in mind, it seems as though fiscal policy has been thrust into a vicious cycle. With debt increasing at concerning rates, expenditure decisions have been complex with limited spending either directed between retaining capital or maintaining social conditions. Henceforth, strategies that need to be proliferated must include advancing fiscal consolidation and policy certainty, while likewise implementing structural reforms to facilitate inclusive growth. Moreover, FDI inflows need to be directed towards assisting government's investment projects with a strategic focus on enhancing local development. While the study has afforded significant insight it has not been without its limitations. These have primarily revolved around the sample size and the limited timeframe of the investigation. Future research, therefore, needs to focus on the use of panel data methodologies that seek insight into more sub-Saharan regions. Furthermore, studies should aim at comparing the different dimensions of globalisation and their impact on public sector composition.

REFERENCES

- Al-Rodhan, N.R. & Stoudmann, G. (2006). Definitions of Globalization: A Comprehensive Overview and a Proposed Definition. Geneva: GCSP.
- Amavilah, V., Asongu, S.A. & Andrés, A.R. (2017). Effects of globalization on peace and stability: implications for governance and the knowledge economy of African countries. *Technological Forecasting and Social Change*, 122(1), 91-103.
- Bayat, T., Tasar, I. & Kayhan, S. (2017). The validity of efficiency and compensation hypothesis for G7 countries. *Ecoforum Journal*, 6(2), 1-7.
- Blackmon, P. (2006). The state: back in the centre of the globalisation debate. *International Studies Review* 8(1), 116– 119.
- Bond, P. & Malikane, C. (2019). Inequality caused by macro-economic policies during an era of durable over accumulation crisis. Johannesburg: University of Johannesburg.
- Borcherding, T.E. (1977). Budgets and Bureaucrats. Durham: Duke University Press.
- Bostan, I., Toderascu, C. & Firtescu, B.N. (2018). Exchange rate effects on international trade competitiveness. *Journal of Risk and Financial Management*, 11(2), 1-19.
- Carmody, P. (2002). Between globalisation and (post) apartheid: The political economy of restructuring in South Africa. *Journal of Southern African Studies*, 28(2), 255-275.
- Deininger, M., 2014. Global Pentecostalism: An Inquiry into The Cultural Dimensions of Globalization. Hamburg: Anchor Academic Publishing.
- Donaldson, A. (2018). Fiscal policy since the great recession. *The Journal of the Helen Suzman Foundation*, 82(1), 27-32.

- Eugster, J., Ho, G. & Piazza, R. (2018). How knowledge spreads. *Finance and Development*, 2018(1), 52 – 55.
- Fanta, A.B., Berkowitz, B., Khumalo, J., Mutsonziwa, K., Maposa, O. & Ramsamy, P. (2017). Digitization of Social Grant Payments and Financial Inclusion of Grant Recipients in South Africa – Evidence from Finscope Surveys. Midrand: FinMark Trust.
- Friedman, M. (1942). The inflationary gap: II. Discussion of the inflationary gap. *The American Economic Review*, 32(2), 314-320.
- Garrett, G. & Mitchell, D. (2001). Globalization and the welfare state: Income transfers in industrialised democracies. *European Journal of Political Research*, 39(1), 145–77
- Gözgör, G., Bilgin, M.H. & Zimmermann, K.F. (2019). Public employment decline in developing countries in the 21st century. Maastricht: Global Labor Organisation.
- Grębosz, M. & Hak, A. (2015). Multidimensional character of globalisation. *Organizacja I Zarządzanie*, 59(1), 69-82.
- Gunter, B.G. & Van der Hoeven, R. (2004). The social dimension of globalization: A review of the literature. *International Labour Review*, 143(1), 7-43.
- Gygli, S., Haelg, F., Potrafke, N. & Sturm, J.E. (2019). The KOF globalisation index– Revisited. *The Review of International Organizations*, 1(1), 1-32.
- Kang, J.W. & Dagli, S. (2018). International trade and exchange rates. *Journal of Applied Economics*, 21(1), 84-105.
- Katona, K., Árvai, L. & Schlett, A. (2013). Stages of globalisation: Alternative ways from eastern Europe and the far east. Bratislava: Kalligram.
- Kaufman, R.R. & Segura-Ubiergo, A. (2001). Globalization, domestic politics, and social spending in Latin America: 1973–97. *World Politics*, 53(4), 553-587.
- Kim, T.K. & Zurlo, K. (2009). How does economic globalisation affect the welfare state? *International Journal of Social Welfare*, 18(2), 130-141.
- Kishan, P.K.V. (2018). Globalization and Inequality – A Pathway Through Education. Ahmedabad: Indian Institute of Management.
- Koster, F. (2009). The welfare state and globalisation: Down and out or too tough to die? *International Journal of Social Welfare*, 18(2), 153-162.
- Lammers, I., van Gerven-Haanpää, M.M. & Treib, O. (2018). Efficiency or compensation? The global economic crisis and the development of the European Union's social policy. *Global social policy*, 18(3), 304-322.
- Larsson, T. (2001). *The Race to The Top: The Real Story of Globalization*. Washington, D.C.: Cato Institute.

- Mishra, R. (1999). *Globalization and the Welfare State*. Cheltenham: Edward Elgar.
- Mtantato, S. & Ngozo, T. (2018). SA's 'welfare state' is in trouble. <https://mg.co.za/article/2018-09-28-00-sas-welfare-state-is-in-trouble>. Accessed: 2019/07/21.
- Ngondo, M. & Khobai, H. (2018). The impact of exchange rate on exports in South Africa. Port Elizabeth: Nelson Mandela University.
- OECD (Organisation for Economic Co-Operation and Development). (2017). *Making Globalisation Work: Better Lives for All*. Paris: OECD Publishing.
- Olawole, K. & Adebayo, T. (2017). Openness and Government Size: The Compensation and Efficiency Hypotheses Considered for Nigeria. Ile-Ife: Obafemi Awolowo University.
- Pannilage, U. (2017). An introduction to the theoretical perspectives of globalisation. *Journal of Humanities and Social Sciences*, 7(1), 1-18.
- Pesaran, M.H., Shin, Y. & Smith, R.J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289-326.
- Potrafke, N. (2018). The globalisation-welfare state nexus: Evidence from Asia. *IFO Working Papers* 272. Munich: University of Munich.
- Rodrik, D. (1998). Has globalization gone too far? *Challenge*, 41(2), 81-94.
- Sebake, B.K. (2017). Neoliberalism in the South African post-apartheid regime. <https://pdfs.semanticscholar.org/0008/9cde9a89a1842e95be82e3d682ad8d8e2343.pdf> Accessed 2019/07/12.
- Stiglitz, J. (2003). Globalization and the economic role of the state in the new millennium. *Industrial and Corporate Change*, 12(1), 3-26.
- Walter, S. (2010). Globalization and the welfare state: Testing the micro-foundations of the compensation hypothesis. *International Studies Quarterly*, 54(2), 403-426.

EXPLORING THE RELATIONSHIP BETWEEN ORGANISATIONAL IDENTIFICATION AND ORGANISATIONAL CITIZENSHIP BEHAVIOUR AMONG EMPLOYEES IN A UNIVERSITY OF TECHNOLOGY IN SOUTH AFRICA

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–Abstract–

Organisational identification is an important construct in organisational behaviour research since employees use it as a source of information about themselves to enhance their self-worth, while organisational citizenship behaviour continues to be of great interest among practitioners and academics in the workplace. The importance of organisational identification lies in its plausible effects on organisational citizenship behaviour. Drawing from a synthesis of the literature, this study seeks to establish a relationship between organisational identification and organisational citizenship behaviour, in a university of technology in South Africa. A quantitative research approach using a cross-sectional survey design and a post-positivist paradigm was applied in this study. Data were collected with the aid of a structured questionnaire and the results are based on 253 responses

obtained through a convenience sampling technique. The data were analysed using descriptive statistics, correlation and regression analyses. A correlation analysis indicated that organisational identification and organisational citizenship behaviour were significantly and positively related. In terms of practical significance, weak to moderate relationships were also revealed between the two constructs. Furthermore, multiple regression analyses revealed that a significant amount of unique variance in altruism, conscientiousness, sportsmanship, courtesy and civic virtue could be accounted for by organisational identification. As a result, this study contributes to the extant literature as it demonstrated that the management of this institution could make use of organisational identification to prompt their employees to display organisational citizenship behaviours in the workplace successfully.

Key Words: Identification, Social categories, Altruism, Conscientiousness, Sportsmanship, Courtesy, Civic virtue

JEL Classification: J53, M12, M54

1. INTRODUCTION

The business environment today is increasingly challenged by technological advancements and global competition. In such dynamic situations, organisations search for ways to improve their employees' behaviours so that they may exhibit positive attitudes in the workplace. Dávila and García (2012) argue that the congruence between the people and the attributes of the organisation may have an impact on how people act and behave within the workplace. The authors add that this congruence occurs when the organisation is able to meet its employees' needs and/or when employees find similarities between their attributes and those of the organisation for which they work. In line with the arguments put forward above, Hayashi (2014) contends that organisational identification (OI) is the root construct in organisational phenomena since every organisation is an aggregation of individuals. Iqbal, Qasem and Anwar (2013) aptly encapsulate the definition of OI as the perception of oneness with an organisation, where an individual defines him/herself in terms of the organisation of which he/she is a member. Yildiz (2013) provides further affirmations that OI is a strong connection that reflects a psychological situation between an employee and a specific organisation. Gözükarar and Şimsek (2015) posit that employees with a high level of OI exhibit positive behaviours and attitudes towards their organisations. More specifically, they frequently display extra-role behaviours, help colleagues to solve work-related problems and contribute to maintaining a climate that fosters collaboration (Zappalà, Toscano & Licciardello, 2019). Accordingly, OI appears to be a

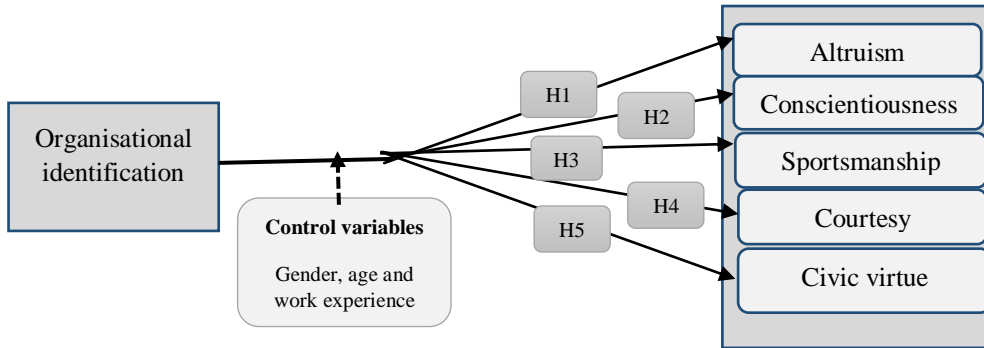
determinant variable that may explain many desirable employees' behaviours within organisations such as organisational citizenship behaviour (OCB).

Organisational citizenship behaviour is a type of behaviour that is not formally described in employees' job descriptions but is highly desired by organisations (Duarte, 2015). Vijayabanu, Govindarajan and Renganathan (2014) suggest that organisations need employees who are good citizens and are willing to extend their responsibilities to co-workers and employers. In the literature, it is argued that when employees exhibit OCB in the workplace, it can enhance an organisation's performance and increase its competitive advantage (Ahmed, Rasheed & Jehanzeb, 2012). Nguyen *et al.* (2016) assert that OCB is contagious since employees working in groups or around other colleagues who tend to exhibit OCB in a daily basis are more likely to start displaying OCB themselves.

Despite calls for studies to explain the dynamics of social identification in organisations, the construct of OI has not received much attention from researchers, especially in the organisational psychology field (Dávila & García, 2012). A lack of such focus has been a major shortcoming in this body of research, leading to suggestions that these areas are low-hanging fruits for future research (Tatachari, 2014). On the other hand, the concept of OCB continues to be of great interest among practitioners and academics (Nguyen, Chang, Rowley & Japutra, 2016) as it has received a fair amount of attention internationally. Of note, Bukhari (2008) observes that, to date, most of the research in the field of organisational behaviour was held in the geographical context of Western cultures. The author contends that in sub-continental countries, culture, environment, values and norms are different and need a separate study to make applicable HR practices. In view of this gap, a review of the literature on OCB alludes to the need for more research studies on the construct in sub-continental regions. Furthermore, the institution being surveyed is experiencing very low morale amongst staff, which might be due to a lack of identification with the institution (organisation) resulting in the absence of a display of OCB. The results of this study will shed more light on this situation and be of particular relevance to the management thereof.

The main purpose of this study is to investigate the relationship between OI and the five dimensions of OCB. A conceptual framework linking OI to the five dimensions of OCB is presented and these relationships are encapsulated in Figure 1.

Figure 1: Conceptual framework illustrating probable relationship between organisational identification and organisational citizenship behaviour



Based on the conceptual framework (Figure 1), the following hypotheses are formulated:

- H1: Organisational identification has a significant effect on altruism.
- H2: Organisational identification has a significant effect on conscientiousness.
- H3: Organisational identification has a significant effect on sportsmanship.
- H4: Organisational identification has a significant effect on courtesy.
- H5: Organisational identification has a significant effect on civic virtue.

2. LITERATURE REVIEW

2.1. Organisational identification

The concept of OI is grounded in the Social Identity Theory (SIT) wherewith individuals classify themselves and others into various social categories, such as organisational membership, gender categories, race groups, age cohorts, or religious affiliations and view their membership in particular groups based on social roles (Jones & Volpe, 2010). Demir (2015) points out that people use group identification as sources of information about themselves and they may also use the group or organisation's status or social standards to enhance their self-worth (Demir, 2015). As a result, OI appears as a particular form of social identification in which individuals categorise themselves as members of an organisation (Miao, Eva, Newman & Schwarz, 2018). For Broomé, Ko and Rosander (2016), OI expresses employees' perceptions of their membership with the organisation and

view themselves as sharing the same attributes as those of the organisation for which they work for. Thus, through OI, employees merge their interests, goals and objectives with those of the organisation. Yung (2013) posits that employees can identify with different organisational groups, namely a workgroup or a team, or the organisation as a whole and these levels of identification are unlikely to be mutually exclusive. For Hameed, Roques and Arain (2013), identification is the level at which the self-conception of an individual has the same characteristics to that of the other identities with which he/she identifies him/herself. Identification describes cognitions, not the actual behaviours of individuals. However, these cognitions can ultimately influence the engagement of behaviours to reinforce perceptions of group membership (Cole, 2013). Hayashi (2014) considers that OI can be construed as having cognitive and affective dimensions. In order for an organisation to survive effectively and maintain its aims, OI is one critical concept (Yildiz, 2013). Moreover, it has a potential to account for many important attitudes and behaviours in organisations such as OCB.

2.2. Organisational citizenship behaviour

The Social Exchange Theory (SET), which conceptualises the relationship between employees and their organisation, has been cited widely as an explanation for why employees might act as good organisational citizens. It is stated that employees who receive positive treatment at work from their employers tend to reciprocate by contributing to the organisation's goals (Habeeb, 2019). Tamunomiebi and Onah (2019) assert that this theory was developed to enhance the understanding of human behaviours in its social endeavours. Vijayabanu *et al.* (2014) define OCB as an additional role behaviour, which is vital for organisations, but which is not defined officially and depends upon the organisational culture. This type of behaviour benefits organisations by improving teamwork effectiveness, efficiency and workplace climate (Nguyen *et al.*, 2016). Five OCB dimensions, namely altruism, conscientiousness, sportsmanship, courtesy and civic virtue exist (Castellano, 2015). These behaviours have been grouped in two main categories: there are certain behaviours that benefit individuals (OCBI) and others that benefit the entire organisation (OCBO) (Pickford & Joy, 2016). Tambe and Shanker (2014) consider altruism as voluntary behaviours wherein an employee provides assistance to his/her colleague(s) with a particular task or problem under unusual circumstances. For Özdemir and Ergun (2015), courtesy simply means the inclination to consult with others and combine perspectives before taking actions. Tamunomiebi and Onah (2019) postulate that conscientiousness is the type of behaviour exhibited by an employee, which exceeds the minimum job requirements. Sportsmanship is the willingness of

employees to tolerate less-than-ideal organisational circumstances without complaining and blowing problems out of proportion (Yildirim, 2014). Civic virtue refers to an employee's constructive involvement in the political process of the organisation by freely and frankly expressing opinions, attending meetings, discussing with colleagues the issues concerning the organisation and reading the organisation's communications such as mails for the wellbeing of the organisation (Tambe & Shanker, 2014).

3. RESEARCH DESIGN

3.1. Research approach

The study was located within a post-positivism research paradigm to ensure that the results could be quantified and are measurable. The methodology applied in this study was quantitative in nature and a cross-sectional survey design was carried out to gather information at a single point in time and to explore the relationships among the constructs. A descriptive study was undertaken in order to provide a basis for quantification of the variables of interest (IO and OCB). Closed-response questions and five-point Likert-scales were used to measure the variables.

3.2. Participants and sampling

The target population included employees working in a selected UoT in South Africa. More specifically, it comprised individuals, both male and female academic staff who were on contract or permanently employed by the institution. All the staff members working in the different faculties and departments were represented in this study (N=405); ranging from the junior lecturers and laboratory technicians (job grade level 9), lecturers (job level 8), senior lecturers (job grade level 7), associate professors (job grade level 6), academic heads of departments (HoDs) and professors (job grade level 5), to the executive deans (EDs) (job grade level 4). The study made use of a non-probability and convenience sampling techniques. A total of 253 employees participated in the study. There were more males (n=151; 59.9%) than females (n=101; 40.1%) in the sample. The majority of respondents were between 30 and 39 years of age (n =90; 35.7%) followed by those who were aged between 50 and 59 years (n = 40; 15.9 %). With regard to respondents' work experience in terms of years, the results indicated that respondents predominantly had work experience of more than 10 years (n = 111; 44.4%). With reference to highest qualifications attained, the majority of respondents had a Master's degree (n = 123; 48.8%). In terms of the jobs grades levels, level 8 (lecturers) was in the majority (n = 163; 64.7%).

3.3. Measuring instrument

A structured questionnaire as the data collection method was used in this study. The first section aimed at gathering information related to the personal information of the participants. It recorded respondent details grouped into five sub-categories related to the gender, age, highest qualification, work experience and job grade levels and made use of a multiple-choice format. The second section measured OI with a six-item scale developed by Mael and Ashforth (1992). The third section measured OCB and used the scale developed by Podsakoff, MacKenzie, Moorman and Fetter (1990).

3.4. Data analysis

For the data entry and analysis, the Statistical Package for Social Sciences (SPSS) programme, version 25.0, was used. To summarise a data set and to describe sample units and variables of interest numerically, descriptive statistics were used. To describe the degree and the direction of potential relationships among variables, Spearman's Rho correlation was used. To examine the predictive relationships between the two variables (OI and OCB), multiple regression analysis was performed.

4. RESULTS AND DISCUSSION

4.1. Correlation analysis

Partial correlations were used. Partial correlation is a measure of the strength and direction of a linear relationship between two continuous variables whilst controlling for the effect of one or more other continuous variables (also known as control variables). By statistically removing the influence of the confounding variable, a clearer indication of the relationship between the study constructs could be observed (Pallant, 2010). The results of the partial correlations are reported in Table 1.

Table 1: Correlations among study constructs

Variables	Mean s	SD	Cronbach α	OI	ALT	CON	SPO	COU	CIV
OI	3.67	1.05	.881	1					
ALT	3.96	.611	.810	.454**	1				
CON	4.13	0.545	.779	.411**	.591**	1			
SPO	4.29	0.661	.817	.249**	.044	.269**	1		
COU	4.29	0.661	.919	.164**	.135**	.454**	.249**	1	
CIV	3.59	0.697	.759	.400**	.310**	.429**	.085	.202**	1

Corr. Coef: Correlation Coefficient; Sig: significant; ** Sig at $p < 0.05$; OI: Organisation identification; ALT= altruism; CON= conscientiousness; SPO= sportsmanship; COU=courtesy; CIV= civic virtue.

With reference to the correlations between OI and the five dimensions of OCB, it appears that the correlation coefficients were statistically significant, ranging from $r=.164$ to $r= 0.454$ at $p < 0.05$ level of significance, suggesting that there are positive linear associations of OI with the five dimensions of OCB. Thus, convergent validity was ascertained through these significant and positive correlations between OI and OCB. In terms of the effect sizes, the correlations showed small to medium effects in terms of practical significance. It is concluded that OI has a positive relationship with altruism ($r=0.454$; medium effect size), conscientiousness ($r=0.411$; medium effect size), sportsmanship ($r=0.249$; small effect), courtesy ($r=0.164$; small effect) and civic virtue ($r=0.400$; medium effect). These results are congruent with the findings of Bacaksiz, Tuna and Seren (2017), Demir (2015), Hameed *et al.* (2013) and Gümüő, Hamarat, olak and Duran (2012), which established a positive relationship between OI and OCB

4.2. Regression analysis

The study made use of hierarchical regression analysis to show if variables of interest explain a statistically significant amount of variance on the dependent variable after controlling for all other variables (confounding variables). The demographic variables, namely gender, age and work experience were entered as control variables. Thus, the three control variables were entered into each model one by one with each dependent variable of OCB (altruism, conscientiousness, sportsmanship, courtesy and civic virtue). Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, homoscedasticity (i.e. probability plots lie reasonably straight diagonal line from left to right on the probability plot and scatter plots are within 3.3 and -3.3 range) and

multicollinearity (at least some relationships with the dependent variable >0.30). Examinations were conducted with a view to corroborate the assumptions of linear regression models along with collinearity diagnostics checks. First, the correlation matrix was examined for existence of multi co-linearity, namely if the predictor variables correlate too highly ($r > 0.9$) with each other (Pallant, 2010). None of the correlations in Table 2 reached a value of $r > 0.9$ hence the data was considered suitable for linear regression analysis. Pallant (2010) further suggests that if the variance inflation factor (VIF) is greater than 10 then the predictor variables are correlated among themselves; hence, collinearity is a cause for concern. In this case, the regression model was deemed appropriate for the data as the VIF values ranged between 1.022 and 1.666. Moreover, tolerance levels that fall below 0.1 indicate serious collinearity problems whereas those tolerance values that are below 0.2 may potentially cause collinearity problems. The tolerance statistics for the predictor variables ranged from 1.000 to 1.471 indicating that there was no collinearity within the data set. Five models 1, 2, 3, 4 and 5 are reported in Table 2.

Table 2: Regression analysis with gender, age, work experience, organisational identification and organisational citizenship behaviour

Model 1 Dependent variable: ALT		Standardised Coefficients	t	Sig.	R ²	Adj R ²	Collinearity Statistics	
		Beta					Tol	VIF
1	(Constant)		10.798	.000	.209	.196		
	Gender	.074	1.249	.213			.906	1.103
	Age	.019	.265	.791			.600	1.666
	Work experience	-.022	-.305	.760			.601	1.665
	OI	.459	8.028	.000**			.978	1.022
Model 2 Dependent variable: CON		Standardised Coefficients	t	Sig.	R ²	Adj R ²	Collinearity Statistics	
		Beta					Tol	VIF
2	(Constant)		13.916	.000	.180	.167		
	Gender	-.025	-.412	.680			.906	1.103
	Age	.017	.225	.822			.600	1.666
	Work experience	.071	.952	.342			.601	1.665

	OI	.413	7.110	.000**			.978	1.022
Model 3		Standardised Coefficients	t	Sig.	R²	Adj R²	Collinearity Statistics	
Dependent variable: SPO		Beta					Tol	VIF
3	(Constant)		9.894	.000	.091	.076		
	Gender	.128	2.020	.045**			.906	1.103
	Age	.194	2.477	.014**			.600	1.666
	Work experience	-.072	-.917	.360			.601	1.665
	OI	.247	4.042	.000**			.978	1.022
Model 4		Standardised Coefficients	t	Sig.	R²	Adj R²	Collinearity Statistics	
Dependent variable: COU		Beta					Tol	VIF
4	(Constant)		12.990	.000	.032	.016		
	Gender	.024	.367	.714			.906	1.103
	Age	.080	.996	.320			.600	1.666
	Work Experience	-.062	-.772	.441			.601	1.665
	OI	.165	2.614	.009**			.978	1.022
Model 5		Standardised Coefficients	t	Sig.	R²	Adj R²	Collinearity Statistics	
Dependent variable: CIV		Beta					Tol	VIF
5	(Constant)		9.815	.000	.192	.179		
	Gender	-.042	-.694	.489			.906	1.103
	Age	.067	.916	.361			.600	1.666
	Work experience	-.192	-2.600	.010**			.601	1.665
	OI	.396	6.863	.000**			.978	1.022

a). Dependent variable: ALT (Altruism), CON (Conscientiousness), SPO (Sportsmanship), COU (Courtesy) and CIV (Civic virtue).

b). Predictors: (Constant): OI (Organisational identification).

c) ** significant at $p < 0.05$

In model 1, gender, age, work experience and OI were entered into the regression model as independent variables and altruism was entered into the model as the dependent variable. Gender, age and work experience showed no statistical significance with altruism ($t=1.249$, $p=0.21$, $p>0.05$; $t=0.265$, $p=0.79$, $p>0.05$; $t=-0.305$, $p=0.76$; $p>0.05$). However, when OI was added into the regression equation, it seemed to have a significant influence on altruism ($t=8.028$, $p=0.00$, $p<0.05$) after controlling for the selected demographic variables. Overall, the adjusted $R^2 = 0.196$ ($\beta=0.459$) indicates that approximately 20% of the variance in altruism could be accounted for by OI within the university. Hence, H1: Organisational identification has a significant effect on altruism, is accepted.

In model 2, the demographic variables (gender, age and work experience) were entered again as control variables, alongside OI as an independent variable, while conscientiousness was entered as the dependant variable. Gender, age and work experience showed no statistical significance with conscientiousness ($t=-0.412$, $p=0.68$, $p>0.05$; $t=0.225$, $p=0.82$, $p>0.05$; $t=-0.952$, $p=0.34$; $p>0.05$), respectively. When OI was added into the regression equation, it seemed to have a significant influence on conscientiousness ($t=7.110$, $p=0.00$, $p<0.05$) after controlling for the selected demographic variables. Overall, the adjusted $R^2 = 0.167$ ($\beta=0.413$) indicates that approximately 17% of the variance in conscientiousness could be accounted for by OI within the university. Hence, H2: Organisational identification has a significant effect on conscientiousness, is accepted.

In model 3, the demographic variables, namely gender, age and work experience were entered again as control variables, together with OI, while sportsmanship was entered as the dependant variable. Work experience showed no statistical significance with sportsmanship ($t=-0.917$, $p=0.68>0.05$). On the other hand, gender and age displayed a statistical significance with sportsmanship ($t=2.020$, $p=0.04<0.05$; $t=2.477$, $p=0.01<0.05$). Moreover, when OI was added into the regression equation, it seemed to have a significant influence on sportsmanship ($t=4.042$, $p=0.00<0.05$) after controlling for the selected demographic variables. Overall, the adjusted $R^2 = 0.076$ ($\beta=0.247$) indicates that approximately 8% of the variance in sportsmanship could be accounted for by OI and the selected demographic variables within the university. Hence, H3: Organisational identification has a significant effect on sportsmanship, is accepted.

In model 4, the demographic variables (gender, age and work experience) were entered again as control variables, along with OI as the independent variable, while courtesy was entered as the dependant variable. Gender, age and work experience showed no statistical significance with courtesy ($t=-0.367$,

$p=0.71>0.05$; $t=0.996$, $p=0.32>0.05$; $t=-0.772$, $p=0.44>0.05$), respectively. Nevertheless, when OI was added into the regression equation, it seemed to have a significant influence on courtesy ($t=2.614$, $p=0.00$, $p<0.05$) after controlling for the selected demographic variables. Overall, the adjusted $R^2 = 0.016$ ($\beta=0.165$) indicates that approximately 2% of the variance in courtesy could be accounted for by OI within the university. Hence, H4: Organisational identification has a significant effect on courtesy, is accepted.

In model 5, the demographic variables, namely gender, age and work experience were entered again as control variables, together with OI as the independent variable, while civic virtue was entered as the dependant variable. Gender and age showed no statistical significance with civic virtue ($t=-0.694$, $p=0.48>0.05$; $t=0.916$, $p=0.36>0.05$). On the other hand, work experience presented a statistical significance with civic virtue ($t=-2.600$, $p=0.01<0.05$). Furthermore, when OI was added into the regression equation, it seemed to have a significant influence on civic virtue ($t=6.863$, $p=0.00<0.05$) after controlling for the selected demographic variables. Overall, the adjusted $R^2 = 0.179$ ($\beta=0.396$) indicates that approximately 18% of the variance in civic virtue could be accounted for by OI and the selected demographic variable within the university. Hence, H5: Organisational identification has a significant effect on civic virtue, is accepted.

These results are synchronous with previous studies. For instance, Demir (2015) stressed that the motivation for OCB may stem from the internalisation of the organisation's norms, values and goals. In line with the argument put forward by Demir (2015), Wu, Liu, Kwong and Lee (2016) reiterate that individuals can view the organisation as part of their self-conceptions through social identification and thereby possess an intrinsic reason to perform citizenship behaviours in the workplace. Kumar and Singh (2012) provide further affirmations that employees may exhibit OCB once they identify with their organisation. Başar and Basim (2015) conclude that when an employee has a strong sense of identification with his/her organisation, s/he tends to perform above and beyond expectations (by displaying OCB) and stand up to adversities, such as economic recessions, financial troubles and mismanagement. Additionally, Oktug (2013) comments that employees with high levels of OI are more energised, exert more effort (OCB), allocate more time for their work and stay longer with the organisation.

5. CONCLUSION

This study lends further credence to previous studies as it confirms that employees are more prone to exhibit citizenship behaviours when they strongly identify with a specific organisation. Synchronous with the studies of He and Brown (2013) and

Johnson and Morgeson (2012), which demonstrated that OI is an important antecedent of OCB; this study established that OI is a strong predictor of altruism, conscientiousness, sportsmanship, courtesy and/or civic virtue. Theoretically and empirically, the findings of this study aim to contribute to the extant literature by providing insights to foster OI and aid managers in establishing a positive work environment that allows employees to exhibit all types of citizenship behaviours.

This study had some limitations that should be considered for future studies. Since this study applied a cross-sectional survey, future research can be in the form of longitudinal studies in which the influence of OI on OCB is examined over an extended period of time. Another limitation was that only one UoT and two of its campuses among many were sampled and this could have affected, to some extent, the generalisation of the study. Future research studies may include more universities/ campuses or may be conducted in company settings/different industries in South Africa or in any other sub-continental country to ensure that the results are more generalisable.

The findings of the study are a valuable contribution to the field of management as a whole and more specifically to human resources. They may also be used by the management of the sampled institution to strengthen their employees' sense of identification with the organisation to encourage them to display OCB in the workplace.

It was reported that OI was positively related to altruism, conscientiousness, sportsmanship, civic virtue and courtesy. Employees categorise themselves and others as members of specific organisations, which later drives them to behave in its best interests by acting as good organisational citizens. To stay tuned in the marketplace, managers must be aware that among the other existing drivers of OCB, OI is also considered as an additional driver. Keeping in mind the positive consequences associated with having employees who are willing to go the extra mile and beyond the call of duty, managers of institutions of higher education in South Africa are advised to foster OI within their institutions continuously.

REFERENCES

- Ahmed, N., Rasheed, A. & Jehanzeb, K. (2012). An exploration of predictors of organizational citizenship behaviour and its significant link to employee engagement. *International Journal of Business, Humanities and Technology*, 2(4):99-106, June.
- Bacaksiz, F.E., Tuna, R. & Seren, A.K.H. (2017). The relationships between organisational identification, job performance, and job crafting: A study among

nurses. *International Journal of Caring Sciences*, 10(1), 251-259.

Başar, U. & Basim, N. (2015). Effects of organisational identification on job satisfaction: Moderating role of organisational politics. *Management and Economy*, 22(2), 663 - 683.

Broomé, M., Ko, S. & Rosander, E. (2016). The role of formal internal communication in organizational identification - a case study of two Swedish offices. Bachelor in Business Administration. Jönköping University.

Bukhari, Z.U. (2008). Key antecedents of Organizational Citizenship Behavior (OCB) in the banking sector of Pakistan. *International Journal of Business and Management*, 3(12), 106-115.

Castellano, W. G. (2015). *A new framework of employee engagement*. New Jersey: Rutgers School of Management and Labor Relations.

Cole, B.M. (2013). Psychological diversity climate and its effects: The role of organisational identification. Doctor of Philosophy. University of North Texas.

Dávila, M.C. & García, G.J. (2012). Organizational identification and commitment: Correlates of sense of belonging and affective commitment. *The Spanish Journal of Psychology*, 15(1), 244-255, March.

Demir, K. (2015). Teachers' organizational citizenship behaviors and organizational identification in public and private preschools. *Procedia - Social and Behavioral Sciences*, 174, 1176-1182.

Duarte, M.B. (2015). Organisational and professional commitments: The influence in nurses' organisational citizenship behaviours. *Tékhne Review of Applied Management Studies*, 13, 2-11.

Gözükara, I. & Şimsek, O.F. (2015). Role of leadership in employees' work engagement: Organizational identification and job autonomy. *International Journal of Business and Management*, 119(1), 72-84.

Gümüş, M., Hamarat, B., Çolak, E. & Duran, E. (2012). Organisational and occupational identification: Relations to teacher satisfaction and intention to early retirement. *Career Development International*, 17(4), 300-313, May.

Habeeb, S. (2019). Relation between organisational citizenship behavior, workplace spirituality and job performance in BFSI sector in India. *Problems and Perspectives in Management*, 17(1), 176-188.

Hameed, I., Roques, O. & Arain, G.A. (2013). Nonlinear moderating effect of tenure on organisational identification (OID) and the subsequent role of OID in

fostering readiness for change. *Group & Organisation Management*, 38(1), 101-127.

Hayashi, S. (2014). Complexity of organizational identification: Measuring ambivalent identification. *International Business Research*, 7(1), 49-59.

He, H. & Brown, A.D. (2013). Organizational identity and organizational identification: A review of the literature and suggestions for future research. *Group and Organization Management*, 38(1), 3-35.

Iqbal, F., Qasem, S. & Anwar, F. (2013). Perceived organisational support, organisational identification and job involvement among temporary and permanent employees-relational analysis. *Journal of Resources Development and Management*, 1, 1-8.

Johnson, M.D. & Morgeson, F.P. (2012). *Cognitive and affective identification in organisational settings*. Honolulu: Michigan State University.

Jones, C. & Volpes, E.H. (2010). Organisational identification: Extending our understanding of social identities through social networks. *Journal of Organisational Behavior*, 1, 1-22.

Kumar, M. & Singh, S. (2012). Roles of perceived exchange quality and organisational identification in predicting turnover intention. *IIMB Management Review*, 24, 5-15.

Mael, F.A. & Ashforth, B.E. (1992). Alumni and their alma mater: A partial test of a reformulated model of organizational identification. *Journal of Organisational Behavior*, 13(2), 103-123.

Miao, Q., Eva, N., Newman, A. & Schwarz, G. (2018). Public service motivation and performance: The role of organizational identification. *Journal of Public Money & Management*, 39(2): 77-85.

Nguyen, B., Chang, K., Rowley, C. & Japutra, A. (2016). Organizational citizenship behavior, identification, psychological contract and leadership frames: The example of primary school teachers in Taiwan. Manchester: University of Salford.

Oktug, Z. (2013). The moderating effects of age and tenure on the relationship between organisational identification and job satisfaction. *Management*, 3(4), 218-222.

- Özdemir, Y. & Ergun, S. (2015). The relationship between organizational socialization and organizational citizenship behavior: The mediating role of person environment fit. *Procedia - Social and Behavioral Sciences*, 207, 432-443.
- Pallant, J. (2010) SPSS survival manual: a step by step guide to data analysis using SPSS. 4th ed. Maidenhead: Open University Press/McGrawHill.
- Pickford, H.C. & Joy, G. (2016). Organisational citizenship behaviours: definitions and dimensions. Oxford: Saïd Business School.
- Podsakoff, P.M., Mackenzie, S.B., Moorman, R.H. & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1, 107-142.
- Tambe, S. & Shanker, M. (2014). A study of organizational citizenship behaviour (ocb) and its dimensions: a literature review. *International Research Journal of Business and Management*, 1, 67-73.
- Tamunomiebi, M.D. & Onah, G.O. (2019). Organizational citizenship behaviour: a critical review of its development in a diversity driven workplace. *The Strategic Journal of Business & Change Management*, 6(1), 41-60.
- Tatachari, S. (2014). Dynamics of organisational identification, psychological contract breach and prestige during early socialization. Rajasthan: Indian Institute of Management Udaipur.
- Van Loo, S. (2010). Organisation and Strategy: Does organizational Identification Influence organizational Commitment?. Bachelor in business. University of Florida.
- Vijayabanu, C., Govindarajan, K. & Renganathan, R. (2014). Organizational citizenship behavior and job involvement of indian private sector employees using visual PLS–SEM model. *Management*, 19(2), 169-180.
- Wu, C-H., Liu, J., Kwong K. H. & Lee, C. (2016). Why and when workplace ostracism inhibits organizational citizenship behaviors: an organizational identification perspective. *Journal of Applied Psychology*, 101(3), 362-378.
- Yildirim, O. (2014). The impact of organizational communication on organizational citizenship behavior: research findings. *Procedia - Social and Behavioral Sciences*, 150, 1095-1100.

Yildiz, K. (2013). Analysis of the relation of teachers' organizational identification and organizational communication. *Educational Sciences: Theory & Practice*, 13(1), 264-272, Winter.

Yung, T.P. (2013). Effects of the organisational antecedents on the organisational identification of faculty members in Hong Kong business schools. Master of Education. The University of Hong Kong.

Zappalà, S., Toscano, F. & Licciardello, S.A. (2019). Towards sustainable organizations: Supervisor support, commitment to change and the mediating role of organizational identification. *Sustainability*, 11(805), 1-12.

ANTECEDENTS OF GENERATION Y STUDENTS' INTEREST AND INTENTION TO USE EBOOKS

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—Abstract—

The origin of the eBook can be traced back to 1971, when the declaration of independence was digitised. However, from there, the evolution of the eBook was slow-moving. It was only after companies such as Apple and Amazon had pushed for a new digital era for books that eBooks really became more popular. This popularity has slowly increased across the globe, but is a growth that has mostly passed South Africa by. This study investigated several reasons for this seeming lack of interest and proposed a model to assess the likelihood of individuals' eBook usage. A self-administered questionnaire was distributed to 370 Generation Y students between the ages of 18 and 24, collecting data on a 6-point Likert scale. This study ensured that the data were valid and reliable before a conceptual model for the data was created. The variables used were environmental awareness, self-reported use, perceived ease of use, perceived usefulness, and interest and intention to use.

The conceptual empirical model showed insufficient model fit and was therefore adapted to find the best fit. The model showed that environmental awareness, self-reported use, and perceived ease of use had a direct impact on both perceived usefulness, and interest and intention to use. Moreover, perceived usefulness had

an influence on interest and intention to use. The empirical model showed that several factors impact whether the Generation Y cohort makes use of eBooks. Thus, it would benefit industry leaders as well as universities to showcase the environmental benefits of using eBooks, demonstrate the ease with which eBooks can be used, and enhance the abilities of eBooks and software to improve the experience. The perceived usefulness could therefore increase, which could lead to higher intention to use and interest eBooks.

Key Words: attitude, eBooks, Generation Y, interest and intention.

JEL Classification: M31

1. INTRODUCTION

The cultural preference of reading printed media has remained stagnant for decades; even now, people prefer to use regular books instead of eBooks as innovation and cultural values compete (Hom, 2016; Walton, 2008). Thus, despite some making use of eBooks, printed books are in most cases far from disappearing or being replaced (Natale & Ballatore, 2016; Van der Velde & Ernst, 2009). However, in the future, as advantages to using eBooks become more popular, the traditional way of reading might become outdated (Thomas, 2011; Renner, 2007).

The first digital library for eBooks, namely Project Gutenberg, was created in 1971. This library was one of the first steps towards the modern eBook (Lebert, 2009) and would lead to contemporary eBook technology, which some have argued is the future of academia (Schwartz, 2012) as well as the future of reading (Jeong, 2012). The use and acceptance of eBooks have increased in academic, scientific and consumer sectors, mostly as it offers unparalleled access to knowledge, storage of high quantities of information as well as portability (Romero-Otero *et al.*, 2013). Furthermore, education can be enhanced when received digitally through the use of eBooks (Picciano, 2012). In addition, students are more likely to use interactive features of digital texts, which could lead to better course outcomes (Berry *et al.*, 2010). Motivating students to read is important; therefore, piquing their interest through interactive content can prove vital (Taylor, 2011).

Despite that eBooks are digital in nature and therefore theoretically able to cross boundaries with ease (Wischenbart *et al.*, 2014), South Africa has been slow to make use of eBooks and its myriad of advantages, compared to developed nations (Wischenbart *et al.*, 2014; Akabor, 2013). Unfortunately, the eBook market within

South Africa has remained stagnant in the introduction stage as per the product life cycle (Lidwell *et al.*, 2010:150). This means that its significant potential has gone unused. As such, eBook markets stand to gain much ground, which is important to both readers and eBook publishers (Myburgh, 2013).

The Generation Y cohort is identified as one of the most prominent forces in the modern market place with a purchasing power that surpasses many other cohorts (Mafini *et al.*, 2014). Markert (2004) defines Generation Y as individuals who were born between 1986 and 2005. This generation was the first to be raised in a technology-driven, digitally connected world and therefore has very high expectations of technology (Sox *et al.*, 2014; Weidauer, 2012; DialogTech, 2016). Consequently, they are the ideal target market for eBooks. Generation Y accounted for 36 per cent of South Africa's population in 2018 (Statistics South Africa, 2018). This study specifically focussed on the student segment of the Generation Y cohort. According to Bevan-Dye *et al.* (2009), those with a tertiary qualification generally have a higher future earning potential and tend to attain greater role model status.

This study aimed to measure attitudes towards eBooks to build a structural model to explain the attitudes and behaviours of Generation Y students. Organisations such as universities and publishers can use this information to adapt their marketing strategies to better market and position eBooks amongst the Generation Y cohort. Moreover, the research can add to the scarce literature available regarding eBook preferences in South Africa, which might be used by organisations or academics to further their own research.

2. LITERATURE REVIEW

The advent of the eBook is mostly attributed to Michael Hart, who uploaded the first eBook to the web in 1971. Although it was not accessible to most people, it laid the groundwork for an entirely new way of reading and engagement (Taylor, 2015). The eBook is the natural evolution of print to digital, which gives it a myriad of advantages over its print predecessor (Van der Velde & Ernst, 2009). These advantages include being able to search text, being available wherever the user has an internet connection or digital device, mobility, as well as taking up much less space than printed books (Jeong, 2012; Zinn & Langdown, 2011; Sharifabadi, 2006).

The attributes of eBooks provide theoretical advantages. However, as per the diffusion of the innovation process (Burton, 2012; Rogers, 2003), eBooks are taking much longer than many other products to diffuse to even the early majority

(PWC, 2017). Therefore, it is important that a method be adopted to reach the early adopters, early majority and, later, the late majority.

The technology acceptance model (TAM) has generally been used to predict behaviour regarding the acceptance of technology (Jin, 2014:472). When an eBook is regarded as easy to use and useful, it will be much more likely to be accepted and incorporated into one's daily life (Jin, 2014; Van der Velde & Ernst, 2009). Studies regarding the use of eBooks have been conducted across the world, namely in the Netherlands (Van der Velde & Ernst, 2009), Canada (Martin & Quan-Haase, 2011), South Korea (Jin, 2014) and Nigeria (Nwagwu & Okafor, 2014). However, in South Africa, data regarding eBooks are still limited. This study proposes a model in which perceived usefulness and perceived ease of use are modeled in conjunction with self-reported use, environmental awareness and interest and intention to use.

Perceived usefulness (PU) essentially states that an individual will make use of a technology that will improve their lives in some way, be it personal, in studies or professionally (Khayati & Zouaoui, 2013). Moreover, it is a strong predictor to gauge behavioural intent (Padilla-Meléndez *et al.*, 2013). PU is relevant to eBooks based on the various advantages of digital reading material compared to a physical book.

Perceived ease of use (PEOU) is a subjective perception of the complexity of a given technology (Gerlach & Buxmann, 2013). Technologies that are generally easier to use and which have a clear indication of functions and benefits tend to be more readily adopted, compared to technologies that are seen as complex (Martin & Quan-Haase, 2013). Where eBooks are concerned, the case for PEOU can also be made, as Jin (2014) and Wiese and Du Plessis (2014) show that among those who perceive eBooks as easy to use, there is higher adoption thereof.

Intention to use is a part of the TAM framework, and looks at the link between acceptance and usage of technology. Thus, intention investigates the actual plan to use a product or service (Agrebi & Jallais, 2014). Interest and intention is an important variable in measuring the decision-making process, as it measures behavioural intention (Jung & Chan-Olmsted, 2012). Self-reported use looks at the actual use of a product or service, which can then show whether usage affects whether an individual will be interested to use it in the future (Perry, 2005; Horton *et al.*, 2001). This study used self-reported use to gauge whether Generation Y individuals used eBooks, firstly, and secondly, to ascertain whether their current

usage had any impact on whether they perceived them as useful. This, in turn, would determine whether they had any intention to use eBooks in the future.

Environmental awareness advocates that humanity should protect and preserve the world, due to the harm caused to the environment by human activity (Pachamama Alliance, 2014). Thus, a pro-environmental individual would act in a way that is pro-environment (Kollmuss & Agyeman, 2002). However, the onus of pro-environmental behaviour also requires regulation, technology and more widespread environmental awareness globally (Rahbar & Wahid, 2011). There are many ways in which individuals can decrease their environmental footprint, of which using eBooks is one. The use of eBooks will result in fewer trees being felled for the making of paper (Eccleston, 2007). However, it is only when each individual makes use of more eBooks than regular books that a net positive impact can be seen, which is why it is important for eBooks to diffuse to the majority (Brown, 2013; Gattiker *et al.*, 2012; Jeong, 2012). This study hypothesised that environmental awareness is mediated by perceived usefulness, interest and intention to use (Metin, 2010).

3. RESEARCH METHODOLOGY

The target population for this study was Generation Y individuals, aged between 18 and 24, registered at a Higher Education Institution (HEI) in South Africa. The sampling frame consisted of the 26 registered HEIs in South Africa, of which two were selected in the Gauteng Province. The province is home to a high number of people and is the economic hub of South Africa (Alexander, 2017). A non-probability, convenience sample of 400 Generation Y students registered at the two HEIs was used to gather information. A self-administered questionnaire was used to gather data from the respondents. The adapted measuring scales that were used include: self-reported use (Perry, 2005; Horton *et al.*, 2001), perceived usefulness and perceived ease of use (Jin, 2014). Finally, their environmental awareness (Metin, 2010) and interest and intention to use eBooks (Jung *et al.*, 2012) were also included. The scaled responses were measured using a six-point Likert scale.

4. RESULTS

The demographics reported on in this study (Table 1) are age, gender, institution and province of origin.

Table 1: Sample description

Age	%	Gender	%	Institution	%	Province	%
18	7,8	Male	44,9	Traditional	52	Gauteng	58,4
19	17,6	Female	54,6	University of Technology	47,4	Mpumalanga	11,6
20	20,5	Missing	0,5	Missing	0,6	Free State	10,5
21	22,2					Other	5,1
22	15,9					North West	4,9
23	9,2					Northern Cape	4,6
24	4,1					KwaZulu-Natal	2,7
Missing	1,4					Eastern Cape	1,6
						Western Cape	0,3
						Missing	0,3

The average age of the respondents was 20.6 years and most respondents indicated that they were from the Gauteng Province. There were more female respondents (54.6%) than male respondents (44.9%). The respondents' HEI type was almost equally distributed with 52% of respondents' coming from a traditional university, while 47.2% were studying at a university of technology. Table 2 outlines the summary of the exploratory factor analysis (EFA) for all the scaled measures.

Table 2: Factors and Factor loadings

Scale	Factor	No. of items	Eigenvalues	Factor loadings	Cronbach's Alpha
IITU	Interest and intention to use	5	7.715	0.600 – 0.844	0.902
SRU	Self-reported use	4	2.303	0.738 – 0.849	0.870
PU	Perceived usefulness	3	1.569	0.730 – 0.845	0.903
PEOU	Perceived ease of use	3	1.336	0.655 – 0.866	0.828
EA	Environmental awareness	4	1.124	0.656 – 0.813	0.795

KMO = 0.891

Bartlett's test of sphericity (chi square = 4389.239, 171 dfs, $p \leq 0.01$)

The EFA returned a Kaiser-Meyer-Olkin (KMO) value of 0.891 measure for sampling adequacy and the Bartlett’s test of sphericity (chi square = 4389.239, 171 dfs, $p \leq 0.01$), indicating the factorability of the data. Furthermore, all of the extracted factors exhibited acceptable factor loadings (above 0.6) and Eigenvalues above 1. Additionally, internal consistency reliability is suggested by the Cronbach’s Alpha values above 0.7. The coefficients, tolerance values and VIFs are reported in Table 3.

Table 3: Correlation matrix and collinearity diagnostics

Factor	IITU	SRU	PU	PEOU	EA	Tolerance values	VIF values
IITU	1						
SRU	0.443**	1				0.785	1.274
PU	0.544**	0.450**	1			0.573	1.745
PEOU	0.510**	0.338**	0.565**	1		0.615	1.626
EA	0.444**	0.176**	0.422**	0.453**	1	0.752	1.330

**Correlation significant at the 0.01 level (2-tailed)

CI = 14.694

The results of the correlation matrix show significance in a 2-tailed direction, with a positive weight for each variable as per expectation. Therefore, nomological validity can be inferred. Next, tolerance values and VIF levels are at acceptable levels (Hair *et al.*, 2014; Gaskin, 2011), suggesting that there are no serious multi-collinearity issues. The condition index of 14.694 is considered high in some circumstances; however, it is to be expected when multiple variables are tested.

The measurement model was run next. All variables covaried where the first loading on each factor was automatically set to 1. The result from the covaried model showed 190 distinct sample moments, and 48 distinct parameters to be estimated. This resulted in a degrees of freedom (df) of 142 and a chi-square value of 462.449. The probability level was 0.000.

Table 4 shows the standardised loading, error variance, a , CR, AVE and \sqrt{AVE} for the variables and items.

Table 4: Estimates for the measurement model

Latent factors	Standardised loadings	Error variance	<i>A</i>	CR	AVE	$\sqrt{\text{AVE}}$
IITU (F1)	0.730	0.533	0.902	0.833	0.500	0.707
	0.800	0.614				
	0.819	0.670				
	0.860	0.739				
	0.826	0.682				
SRU (F2)	0.704	0.496	0.870	0.799	0.500	0.707
	0.746	0.556				
	0.884	0.781				
	0.830	0.688				
PU (F3)	0.903	0.815	0.903	0.749	0.500	0.707
	0.946	0.895				
	0.773	0.598				
PEOU (F4)	0.713	0.509	0.828	0.749	0.500	0.707
	0.810	0.656				
	0.858	0.737				
EA (F5)	0.654	0.428	0.795	0.798	0.500	0.707
	0.737	0.543				
	0.811	0.658				
	0.615	0.379				
Correlations:	F1 ↔ F2	0.502		F2 ↔ F4	0.365	
	F1 ↔ F3	0.582		F2 ↔ F5	0.217	
	F1 ↔ F4	0.545		F3 ↔ F4	0.582	
	F1 ↔ F5	0.506		F3 ↔ F5	0.463	
	F2 ↔ F3	0.510		F4 ↔ F5	0.537	

As shown in Table 4, internal-consistency and composite reliability are evident as CR and *a* values exceed 0.700 for each factor. Convergent validity is also evident as CR values exceed 0.700 and AVE equals 0.500 in each case. Moreover, in each case, the correlation coefficients did not exceed $\sqrt{\text{AVE}}$, which implies that

discriminant validity is present. Next, model fit was assessed, and the following was found: IFI = 0.928, TLI = 0.913, CFI = 0.928, RMSEA = 0.076. SRMR = 0.067. Consequently, attitude towards eBooks is a five-factor model that shows internal-consistency reliability, composite reliability, construct validity and proper model fit. Based on the measurement model, a conceptual model was created that hypothesised that environmental awareness, self-reported use and perceived ease of use are mediated by perceived usefulness to interest and intention to use. The model fit for the conceptual model yielded the following results: IFI = 0.912, TLI = 0.896, CFI = 0.912, RMSEA = 0.084, SRMR = 0.092. As these results did not show adequate model fit, an adapted model was constructed to achieve model fit according to the data. The following model was hypothesised, where EA, SRU and PEOU are mediated by PU, but also affected IITU directly. Model fit for the second model is as follows: IFI = 0.926, TLI = 0.910, CFI = 0.926, RMSEA = 0.078, SRMR = 0.062. As the model shows adequate model fit, it is implied that attitude towards eBooks is a five-factor model where EA, SRU and PEOU are mediated to IITU through PU and influence IITU directly. The unstandardised and standardised regression coefficients, standard error estimates and p-values for the structural model are shown in Table 5.

Table 5: Structural model estimates

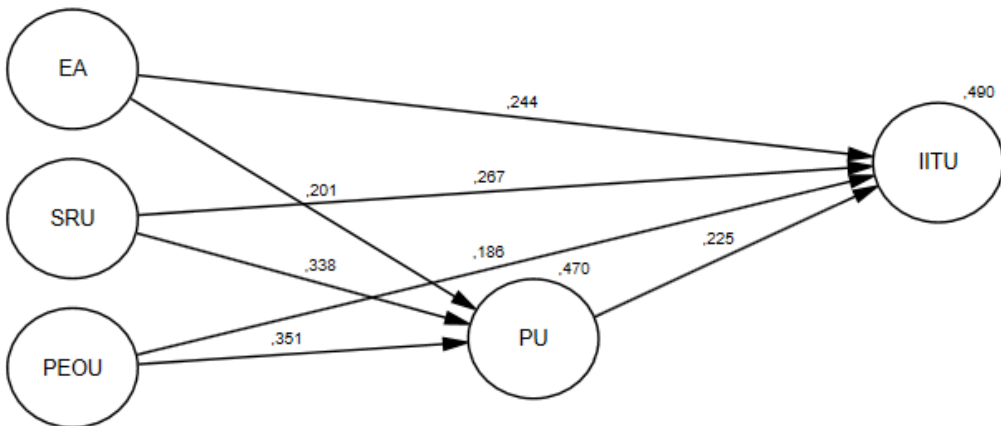
Paths	Un-standardised β	β	SE	<i>p</i>
EA → PU	0.299	0.201	0.090	0.00
SRU → PU	0.360	0.338	0.057	0.00
PEOU → PU	0.528	0.351	0.097	0.00
PU → IITU	0.176	0.225	0.051	0.00
EA → IITU	0.284	0.244	0.073	0.00
PEOU → IITU	0.219	0.186	0.079	0.01
SRU → IITU	0.223	0.267	0.048	0.00

β : beta coefficient; SE: standardised error; *p*: two-tailed statistical significance

As seen in Table 5, all regression paths were positive and statistically significant ($p \leq 0.01$). Environmental awareness ($\beta = 0.201$, $p < 0.01$), self-reported use ($\beta = 0.338$, $p < 0.01$) and perceived ease of use ($\beta = 0.351$, $p < 0.01$) have an effect on perceived usefulness. Perceived usefulness ($\beta = 0.225$, $p < 0.01$), environmental awareness ($\beta = 0.244$, $p < 0.01$), perceived ease of use ($\beta = 0.186$, $p \leq 0.01$) and self-reported use ($\beta = 0.267$, $p < 0.01$) have an effect on interest and intention to

use. The structural model with the standardised regression estimates are illustrated in Figure 1.

Figure 1: Structural model



The combination of environmental awareness, self-reported use, perceived ease of use, perceived usefulness and interest and intention to use explain 49 per cent of variance according to the calculated squared multiple correlation coefficient.

5. CONCLUSION

The eBook industry in South Africa is currently diffusing at a very slow rate. This could change if the Generation Y cohort started using this technology and spread its benefits to the wider population in South Africa. The empirical model shows that several factors impact whether Generation Y students make use of eBooks. The growth of the eBook industry could be sparked if the environmental benefits of using eBooks are communicated in the marketing approach by eBook publishers. Furthermore, the results suggest that once the respondents had used eBooks (self-reported use), it would influence their perceptions regarding the usefulness of eBooks as well as their intention to use eBooks in the future. Publishers of eBooks should make trial versions of their books available to encourage students to use eBooks without any financial implications. Moreover, publishers should focus on the ease with which eBooks can be used, and enhance the abilities of eBooks and software to improve the experience. Publishers can also showcase the features of eBooks with “how-to” video guides. This might influence the perceptions regarding the ease of use of eBooks and the perceived

usefulness would increase, which could lead to higher intention and interest in using eBooks.

REFERENCES

- Agrebi, S. and Jallais, J. (2015). Explain the intention to use smartphones for mobile shopping. *Journal of Retailing and Consumer Services*, 22, 16-23.
- Akabor, N. (2013). *Google launches e-books in SA*. <http://www.techcentral.co.za/google-launches-e-books-in-sa/44859> Accessed 2016/03/20.
- Alexander, M. (2017). *Gauteng Province, South Africa*. <https://www.brandsouthafrica.com/tourism-south-africa/geography/gauteng-province-south-africa>. Accessed 10/08/2017
- Berry, T., Cook, L., Hill, N. & Stevens, K. (2010). An exploratory analysis of textbook usage and study habits: Misperceptions and barriers to success. *College Teaching*, 59(1):31-39.
- Brown, A. (2013). *How green are e-books and e-book readers?*. http://www.huffingtonpost.com/luxeco-living/how-green-are-ebooks-and-ebook-readers_b_3468080.html Accessed 2016/10/23.
- Burton, K.D. (2012). *Managing emerging risk: The capstone of preparedness*. 1st ed. Boca Raton: CRC Press.
- DialogTech. (2016). Why smartphones are the millennial device of choice. <https://www.dialogtech.com/blog/mobile-marketing/why-smartphones-are-the-millennial-device-of-choice>. Date of access: 30/06/2019.
- Eccleston, P. (2007). *Public 'concerned on environment', survey says*. <http://www.telegraph.co.uk/news/earth/earthnews/3312688/Public-concerned-on-environment-survey-says.html> Accessed: 2016/10/23.
- Gaskin, J. 2011. *Detecting multicollinearity in SPSS*. <https://www.youtube.com/watch?v=oPXjQCtyoG0>. Accessed 1/12/2017
- Gattiker, T.F., Lowe, S.E. & Terpend, R. (2012). Online texts and conventional texts: Estimating, comparing, and reducing the greenhouse gas footprint of two tools of the trade. *Decision Sciences Journal of Innovative Education*, 10(4):589-613.

Gerlach, J. & Buxmann, P. (2013). Analyzing electronic book acceptance: A compatibility perspective. (*In System Sciences (HICSS): Hawaii International Conference. Hawaii: IEEE. p. 2813-2822*).

Hair, J.F., Hult, G.T.M., Ringle, C.M. & Sarstedt, M. 2014. A primer on partial least squares structural equation modeling (PLS—SEM). 1st ed. Thousand Oaks: Sage Publications, Inc.

Hom, M. (2016). *Why Humans Prefer Print Books*. <http://scitechconnect.elsevier.com/why-humans-prefer-print-books> Accessed 2018/07/19.

Horton, R.P., Buck, T., Waterson, P.E. & Clegg, C.W. (2001). Explaining intranet use with the technology acceptance model. *Journal of Information Technology*, 16(4):237-249.

Jeong, H. (2012). A comparison of the influence of electronic books and paper books on reading comprehension, eye fatigue, and perception. *The Electronic Library*, 30(3):390-408.

Jin, C.H. (2014). Adoption of e-book among college students: The perspective of an integrated TAM. *Computers in Human Behavior*, 41(1):471-477.

Jung, J., Chan-Olmsted, S., Park, B. & Kim, Y. (2012). Factors affecting e-book reader awareness, interest, and intention to use. *New Media & Society*, 14(2):204-224.

Khayati, S. & Zouaou, S.K. (2013). Perceived usefulness and use of information technology: The moderating influences of the dependence of a subcontractor towards his contractor. *Journal of Knowledge Management, Economics and Information Technology*, 3(6):1-28.

Kollmuss, A. & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior?. *Environmental Education Research*, 8(3):239-260.

Lebert, M. (2009). A short history of eBooks. <http://www.etudes-francaises.net/dossiers/ebookEN.pdf> Accessed 2016/03/16.

Lidwell, W., Holden, K., Butler, J. & Elam, K. (2010). *Universal principles of design*. 2nd ed. Beverly: Rockport Publishers.

Mafini, C. Dhurup, M. & Mandhlazi, L. (2014). Shopper typologies amongst Generation Y consumer cohort and variations in terms of age in the fashion

apparel market. *Independent research journal in the management sciences*. 14(1):1-11.

Markert, J. (2004). Demographics of age: Generational and cohort confusion. *Journal of Current Issues & Research in Advertising*, 26(2):11-25.

Martin, K. & Quan-Haase, A. (2013). Are e-books replacing print books? tradition, serendipity, and opportunity in the adoption and use of e-books for historical research and teaching. *Journal of the American Society for Information Science and Technology*, 64(5):1016-1028.

Metin, M. (2010). A study on developing a general attitude scale about environmental issues for students in different grade levels. *Asia-Pacific Forum on Science Learning & Teaching*, 11(2):1-19.

Myburgh, E., Kruger, M. & Saayman, M. (2014). A motivation-based typology of triathletes. *South African Journal for Research in Sport, Physical Education and Recreation*, 36(3):117-134.

Natale, S. & Ballatore, A. (2016). *The myth of the disappearing book*. <https://theconversation.com/the-myth-of-the-disappearing-book-66717>. Accessed 5/12/2018.

Nwagwu, W.E. & Okafor, J.L. (2014). Diffusion of eBooks among postgraduate students of the University of Ibadan, Nigeria. *Library Review*, 63(1/2):86-109.

Pachamama Alliance. (2014). *Environmental awareness*. <https://www.pachamama.org/environmental-awareness> Accessed 2016/10/10.

Padilla-Meléndez, A., Del Aguila-Obra, A.R. & Garrido-Moreno, A. (2013). Perceived playfulness, gender differences and technology acceptance model in a blended learning scenario. *Computers & Education*, 63(1):306-317.

Picciano, A.G. (2012). The evolution of big data and learning analytics in American higher education. *Journal of Asynchronous Learning Networks*, 16(3):9-20.

PWC (PriceWaterhouseCooper). (2015). <https://www.pwc.co.za/en/assets/pdf/entertainment-and-media-outlook-2015-2019.pdf> Accessed 2016/09/16.

Rahbar, E. & Wahid, A.N. (2011). Investigation of green marketing tools' effect on consumers' purchase behavior. *Business strategy series*, 12(2):73-83.

Renner, R.A. (2007). *EBooks—costs and benefits to academic and research libraries*.

http://www.springer.com/cda/content/document/cda_downloaddocument/eBook+White+Paper.pdf Accessed 2016/03/18.

Rogers, E.M. (2003). *Diffusion of innovations*. 5th ed. New York: Free Press.

Romero-Otero, I., Iglesias-Fernández, E. & Giménez-Toledo, E. (2013). *Use, acceptance and expectations for the eBook in a research library*.

<http://bid.uv.es/en/31/romero3.htm> Accessed 2016/03/24.

Schwartz, S. (2012). *EBooks: The format of the academic future*.

<http://www.theguardian.com/higher-education-network/blog/2012/mar/15/ebooks-academic-future-universities-steven-schwartz?INTCMP=SRCH> Accessed 2016/03/23.

Sharifabadi, R.S. (2006). How digital libraries can support e-learning. *The Electronic Library*, 24(3):389-401.

Statistics South Africa (2018). *Statistical Release P0302: 2018 Mid-year Population Estimates*.

<http://www.statssa.gov.za/publications/P0302/P03022017.pdf>. Accessed 12.06.2019.

Sox, C.B., Kline, S.F. & Crews, T.B. (2014). Identifying best practices, opportunities and barriers in meeting planning for Generation Y. *International Journal of Hospitality Management.*, 36(1): 244-254.

Taylor, A.K. (2011). Students learn equally well from digital as from paperbound texts. *Teaching of Psychology*, 38(4):278–281.

Taylor, M. (2015). *A very short history of eBooks*.

<http://digitalpublishing101.com/digital-publishing-101/digital-publishing-basics/a-very-short-history> Accessed 2016/08/15.

Thomas, L.C. (2011). eBooks: Access, Technology, & Licensing. *Against the Grain*, 23(5):27-30.

Van der Velde, W. & Ernst, O. (2009). The future of eBooks? Will print disappear? An end-user perspective. *Library Hi Tech*, 27(4):570-583.

Walton, E.W. (2008). E-book use versus users' perspective. *College & Undergraduate Libraries*, 14(4):19-35.

Weidauer, J. (2012). Millennials determine future of retail. *Drug Store News*, 34(12):18.

Wiese, M. & Du Plessis, G. (2014). The battle of the e-textbook: Libraries' role in facilitating student acceptance and use of e-textbooks. *SA Jnl Libs & Info Sci*, 80(2):17-26.

Wischenbart, R., Celaya, J., Carrenho, C., Kovac, M., Mallya, V. & Licher, V. (2014). *The global eBook report: A report on market trends and developments*. http://www.wischenbart.com/upload/1234000000358_04042014_final.pdf
Accessed 2016/03/26.

Zinn, S. & Langdown, N. (2011). E-book usage amongst academic librarians in South Africa. *SA Journal Libs & Info Sci*, 77(1):104-114.

THE ADVOCACY INTENTION OF MILLENNIALS ON SOCIAL MEDIA REGARDING SMARTPHONE BRANDS

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–Abstract–

The smartphone industry has grown in the last decade and now consists of a variety of vendors, many of whom people are not aware of. There has also been a shift in power from brands such as Nokia, Sony, and Blackberry, to brands such as Apple, Samsung, and Huawei. As such, it has become increasingly important to differentiate brands as technology has become democratised. This paper aims to provide a method for smartphone vendors to differentiate themselves in a crowded and competitive market. The differentiating factor considered is social media, which could be used to reach a high number of individuals to whom could be marketed, and would, ideally, become advocates of the brand. This study hypothesised that reaching a point of brand advocacy relies on four other factors, namely perceived usefulness of social media, anticipated benefits of social media sites, intention to be involved in social media sites, and commitment to social media sites. To test this hypothesis, a sample size of 512 Millennial students were taken from various universities. The data showed that reaching advocacy does indeed rely on the four factors as hypothesised and that, therefore, advocacy among Millennials is a five-factor model whereby perceived usefulness, anticipated benefits and intention to be involved are mediated to advocacy intention through commitment. As such, organisations, especially smartphone brands should focus on the four factors preceding advocacy to enable customers and social media followers to become more prolific in their word of mouth campaigns. Advocacy entails defending the brand, speaking well of the brand, and

trying to convince others to buy the brand. Moreover, where customers become advocates, they are more difficult to persuade to use other brands and forgive brands more easily for their mistakes. This is deemed to be a crucial aspect of the saturated globalised smartphone market.

Key Words: social media, smartphone, advocacy intention, Millennials

JEL Classification: *M31*

1. INTRODUCTION

Advocacy is seen as the final step in the relationship between the brand and the user, where the individual not only talks about a brand and is not only resistant to the marketing efforts of other brands, but also defends the brand and is likely to forgive a brand for mistakes. However, reaching advocacy is a difficult destination, which takes time, effort, and resources. Moreover, upon reaching advocacy, the brand must still work hard, retain quality, and involve customers. Ultimately, organisations that make the effort, reap the rewards as advocacy increases emotions towards a brand (Hudson, Roth, Madden & Hudson, 2015:74). Individuals interacting with a brand on social media develop an emotional attachment, which in turn leads to word of mouth. Advocacy comes more naturally to the Millennial cohort as they grew up with social media, which gives a voice to everyone. It is therefore important for organisations to make use of this attempt to reach the stage in which this generation wants to advocate the brand (McCarthy, 2017). Social media is a form of electronic communication in which followers create online communities, share information, content, personal messages, and ideas (Merriam-Webster, 2016). Social media marketing is seen as an evolution of relationship marketing, which, in its time, succeeded transactional marketing (Moretti & Tuan, 2013:250). Thus, social media encourages active involvement from consumers. This involvement has taken on a life of its own where we now see communication regarding a brand being more commonplace; individuals discuss, create, share, and consume, all without organisations' input or permission (Peters, 2019; Kietzmann, Hermkens, McCarthy & Silvestre, 2011:242). Some brands end up with loyal followers who border on the fanatical and tend to vehemently defend and follow certain brands (Iliff, 2018; Reid, 2011). These adamant followers tend to buy more, are willing to keep buying despite price increases and become very vocal in their support of the brand that they love (Bhasin, 2011).

There has been a transition towards the online sphere, to the extent that some even go as far as stating that when organisations are not on social networks, they are not part of cyberspace (Jackson, 2018; Kaplan & Haenlein, 2010:67). Online marketing has become crucial to many businesses, especially those of smartphone brands as competition has increased dramatically. Jesensky (2013) suggests that smartphones are extremely important in both personal and professional aspects of the individual's daily life. It serves to enhance life and can serve as a minicomputer that keeps us connected, helps run our lives more efficiently, gives us enhanced functionality, and entertains us. The smartphone has been heralded as a new dimension in mobility, which has changed and personalised social interaction forever (Philips, 2014). A formal definition of the smartphone is "a cellular telephone with an integrated computer and other features not originally associated with telephones, such as an operating system, web browsing and the ability to run software applications" (Rouse, 2018). However, many phones exist, each equipped with different capabilities. Therefore, in this context, the smartphone is described as a programmable mobile phone which can send messages, download applications, and utilises Wi-Fi and GPS (Cassavoy, 2018).

2. PROBLEM STATEMENT

Retaining customers is much more profitable than finding new ones and advocacy may prove to be a winning formula where profit is the driving force of the organisation (Parrish, 2015:24). Social media has become a key factor in its impact on marketing communication and has become an indispensable component of marketing strategies. This can be attributed to the increase in the amount of time that individuals spend on social media, as well as the fact that an abundance of communication takes place using social media platforms (Willis, 2017). However, not all brands enjoy loyalty on social media as the online era has led to users quickly switching brands despite having liked a brand previously (Appiah *et al.*, 2017:6). Here, focussing on the Millennial cohort can aid organisations that are prepared to go through the effort of building relationships (Jakubowitz, 2017). In making the effort to market to Millennials with an online site, organisations can also defend themselves against criticism as well as explain why mistakes were made (Yan, 2013). However, finding ways in which to garner a large enough following on social media is difficult and can prove detrimental when not used correctly (Taylor, 2014). Moreover, few smartphone brands enjoy such a ferocious following as Apple, Samsung, and Huawei (Oxborrow, 2018), which

means that smaller brands must work much harder to differentiate themselves. As such, through social media, there can be differentiation, however, the crux is to use it correctly to achieve success (Abeysekera, 2017:18).

3. LITERATURE REVIEW

Perceived usefulness forms part of the technology acceptance model in which perceived usefulness is seen as the extent to which an individual believes “something” will help them perform a task better (Thominathan & Ramayah, 2015:78). Perceived usefulness, known as extrinsic motivation, is linked to motivation to use information technology, where extrinsic motivation is seen as taking an action that will provide value to the individual (Liaw & Huang, 2013:16; Lin & Lu, 2011:1153). The technology acceptance model uses perceived usefulness in conjunction with ease of use, to gauge behavioural intention (Elkaseh, Wong & Fung, 2016:192). Perceived usefulness is an important factor in the technology sphere, as it is the subjective view that an individual has regarding whether technology will make their life easier. Thus, it is important for brands to know that the technology they adopt, such as social media, is useful to the individual using it (Bugembe, 2010:16). There are several key factors that influence whether something is useful. How fast it is, how time-saving it is, how much effort it can save, how much costs it can reduce and how useful it is, overall (Renny *et al.*, 2013:215). In addressing the usefulness of smartphones, one merely has to look at Millennials, who are a generation who cannot live without smartphones (Lyons, 2016). The Millennial cohort is shown to be one of the most influenced generations, and are in constant contact with peers, and showcase their lives to the world (Stein, 2013). They have a close relationship with social networks (Nanji, 2017) and access social media daily, for a variety of reasons (Tingley, 2015:1).

Consumers weigh the effects of their behaviour in terms of anticipated benefits. Thus, they would commit to behaviour when the benefits outweigh the costs (Laux, 2000:425). It is important for brands to keep this in mind, and thus focus on providing experiences over simply providing products. These experiences are increasingly important as information technology permeates every facet of life, brands are becoming larger and more important, in some circumstances, and communication and entertainment have become a focus in many aspects of life (Clark, 2015; Schmitt, 1999:54-55). As such, there are several benefits that the

consumer wants to see in using social media, such as promotions, they want to be heard, they want assistance, and they want to be on the forefront of knowing what a company is doing. These are important factors and should be used by brands to further their relationship with customers, by having them feel as though they are a part of something (Tsimonies & Dimitriadis, 2014:334-335). The benefits which an individual want or feels they should have, are highly subjective, however, and are not static nor dichotomous. Therefore, an individual may want a certain benefit today, but may doubt benefits the next day, or doubt future benefits. However, where social media is concerned, it may pay to simply ask individuals what they want from the brand and from their social media pages, and simply apply it in order of importance (Meekma, 2017). The Millennial cohort may show loyalty to one brand and have no interest in another. Where smartphones are concerned, the Millennial cohort is very brand loyal (Smith, 2015), however, regarding private or brand labels, they prefer benefits and value, over a specific brand (Pasquarelli, 2017). In some instances, it helps to create a need, which then also creates a benefit, where the Millennial cohort may not have noticed it before (Gibson, 2015).

Intention to be involved signifies the state which the consumer wants to attain (Patel, 2017). It is an important variable to be aware of as it can show the positive or negative behaviours of consumers towards a brand (Bush, Martin, & Bush., 2004:110). Thus, the behaviour is the outcome of the input from the organisation, which shows whether communication with consumers was successful (Lin & Lu, 2011:1152-1153). As such, where the organisation has been successful in their communication, the consumer's attitude may lead to positive behaviours, such as purchases or actual usage (Rauniar, Rawski, Yang, & Johnson, 2014:8). However, it is important to note that the outcome or behaviour of the consumer is contingent on several factors. These factors include consumer traits, characteristics of products or services, situational factors, previous experience, and the trust the consumer has in the organisation (Weisberg *et al.*, 2011:83).

Commitment has become a crucial component in business relationships, where the relationship is based on the long term, and where there is a lasting intention to maintain the relationship. Commitment is often used in conjunction with trust and satisfaction to gauge relationship quality (Walter, Muller, Helfert & Ritter, 2003:160).

Commitment and loyalty are correlated in that both look at re-patronisation of a

product or service in a repetitive manner (Sahin *et al.*, 2011:1291). Furthermore, committed customers see the relationship they have with the brand as beneficial, and the termination thereof yields lower benefits than maintaining it. However, to achieve the commitment sought by a brand, a certain level of trust must be achieved and maintained (Hennig-Thurau, Gwinner, & Gremler, 2003:232). Commitment is further precipitated by satisfaction with a brand, and certain psychological factors, such as identification, are also required to achieve commitment (Casalo, Flavian, & Guinalui, 2010:358).

The Millennial cohort's behaviours are varied in scope but have been shown to be affected by celebrities, for example. Sports celebrities are shown to be able to shift brand loyalties, as well as influence word of mouth by Millennial individuals (Bush *et al.*, 2004:113). Furthermore, electronic word of mouth, online communities, and online advertisement prove to be effective to drive intention through social media platforms, where the Millennial cohort is concerned (Balakrishnan *et al.*, 2014:176). There is a strong correlation between the Millennial cohort's brand loyalty, their satisfaction and their relationship intention, which shows that their intentions are, as shown before, more nuanced, and should be investigated thoroughly to build a stable model regarding their wants and needs (Mostert, Petzer, & Weideman, 2016:28). In order to motivate the Millennial cohort towards intention and finally behaviour, a brand must make a connection, must have its own unique and genuine personality, and must form part of a lifestyle (Nahai, 2013).

In general, the Millennial cohort appears to be less committed than previous generations, because they tend to believe in wider possibilities (Berry, 2018). Moreover, it is a generation that has more choice than ever before, which creates an even more difficult paradigm in which switching is simply easy (Moore, 2017). Thus, to reach this commitment takes hard work from organisations, where they must first build trust, and then ensure to involve the Millennial cohort customers in their programmes. When the Millennial cohort feels involved, they feel a part of something and are more likely to be committed (Nusair *et al.*, 2013:20).

4. METHODOLOGY AND FINDINGS

4.1. Research design

This study made use of descriptive research with a single, cross-sectional design. The target population selected was full-time students of the Millennial cohort, from ages 18–24. These students had to be registered at one of South Africa's HEIs (Higher Education Institutions) during the extent of the data gathering. As such, the sampling frame consisted of the 26 registered South African HEIs, from which a judgement sample of three HEI campuses, located in Gauteng, was selected. The judgement sample included a traditional university, a comprehensive university, and a university of technology.

For the sampling method, the study made use of non-probability, convenience sampling. The study aimed for a total of 600 questionnaires based on similar studies (Kim & Ko, 2012:1483) as well as to provide adequate data for structural equation modelling (Wolf, 2013:914; 918). A questionnaire was used in which a 6-point Likert scale was adopted with the Likert items strongly disagree (1) to strongly agree (6). Lecturers handed out the questionnaires to willing respondents. After cleaning, a total of 512 questionnaires were deemed usable. The questionnaire had three sections namely Section A for demographics, Section B for moderators, and Section C for the main empirical research of the study. The five variables used were perceived usefulness (Rauniar *et al.*, 2014), anticipated benefits (Ashley *et al.*, 2011), intention to be involved (Rauniar *et al.*, 2014; Ashley *et al.*, 2011), commitment (Badrinarayanan & Laverie, 2013), and advocacy intention (Wallace, Buil, & De Chernatony, 2014; Lee, Hsu, Chen, & Huang, 2010).

4.2. Data analysis and results

A factor analysis was conducted to ensure that all items fit into the correct factors. Each item fit as expected into the five factors and yielded a KMO (Kaiser-Meyer Olkin) = 0.899, Chi-Square = 7216.166, df = 351 and $p < 0.000$. Next, skewness and kurtosis were measured along with Cronbach's alpha, as can be seen in Table 1 below.

Table 1: Skewness, kurtosis, Cronbach's alpha

Factor	<i>n</i>	Items scale	in	Mean	Skewness	Kurtosis	Cronbach's alpha
PU	512	3		4.616	-0.848	0.699	0.870
AB	512	3		4.893	-0.903	1.152	0.713
ITBI	512	4		4.822	-0.963	0.966	0.871
C	512	4		4.746	-1.047	1.522	0.871
AI	512	6		5.072	-0.716	0.456	0.851

As shown in Table 1, the minimum mean value for the various factors was 4.616 and both skewness and kurtosis fell within the -2 to 2 acceptable range (IS, 2010; Chan, 2003:282). Next, the Cronbach's alpha for each factor showed a value of $\alpha > 0.7$, which indicated that the internal consistency reliability of the constructs was acceptable (George & Mallery, 2016:240). A correlation analysis was conducted next to assess the validity of the study. Table 2 shows the findings of the correlation analysis.

Table 2: Correlation matrix

Factor	PU	AB	ITBI	CI	AI
PU	1				
AB	0.262**	1			
ITBI	0.389**	0.396**	1		
C	0.315**	0.354**	0.407**	1	
AI	0.236**	0.326**	0.394**	0.559**	1

Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis shown in Table 2 shows that there was movement in the expected direction for each of the factors in relation to one another. As each factor shows significance in the expected direction, nomological validity was assumed.

The measurement model of the data was run and yielded the results showed in the next table, which shows the AVE (Average Variance Extracted), CR (Composite Reliability), AVE squared, correlations, as well as the model fit. In the table below PU = Perceived Usefulness; AB = Anticipated Benefits; ITBI = Intention To Be Involved; C = Commitment; AI = Advocacy Intention.

Table 3: Validity and reliability of the measurement model

Average variance extracted and composite reliability				Correlation coefficient					
Factor	CR	AVE	\sqrt{AVE}	PU	AB	ITBI	C	AI	
PU	0.748	0.500	0.707	PU	1				
AB	0.749	0.500	0.707	AB	0.312	1			
ITBI	0.797	0.500	0.707	ITBI	0.405	0.479	1		
C	0.800	0.500	0.707	C	0.350	0.424	0.452	1	
AI	0.811	0.500	0.707	AI	0.268	0.399	0.424	0.648	1
IFI	TLI	CFI	RMSEA	SRMR					
0.945	0.934	0.944	0.059	0.045					

Table 3 shows a CR > 0.700 for each factor, which suggests that composite reliability is present. Next, as CR values exceed 0.700 and AVE equals 0.500 in each factor, convergent validity can also be assumed. As can be seen in the correlation coefficient, compared to the squared AVE, all correlation values were below the 0.707 point of the squared AVE, which suggests discriminant validity. Lastly, all model fit indices showed sufficient weights, which suggest a proper model fit is also present. Thus, it can be assumed that AI among Millennials is a five-factor model where PU, AB, ITBI, C, and AI are viable factors in the model. Based on the viability of the measurement model, a conceptual model is hypothesised to show the interaction between the factors. The following model shown here in Figure 1 shows the conceptual model proposed by this study.

Figure 1: Conceptual model (PU = Perceived Usefulness; AB = Anticipated Benefits; ITBI = Intention To Be Involved; C = Commitment; AI = Advocacy Intention)

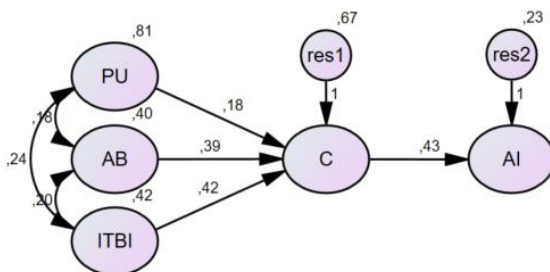


Figure 1 shows the five variables applicable to the conceptual model. Perceived usefulness, anticipated benefits and intention to be involved are independent

variables which are mediated to the dependent variable by commitment. The dependent variable is advocacy intention. The conceptual model yielded the following results as seen in Table 4, which shows the significance of the paths, the path estimates, as well as the regression weights. This model was also substantiated by assessing model fit, which yielded the following results.

Table 4: Path estimates, SE, *p*, regression weights

	Estimate	SE	<i>p</i>	Reg weight	
PU → C	0.175	0.054	0.001	0.162	
AB → C	0.393	0.098	***	0.255	
ITBI → C	0.424	0.088	***	0.281	
C → AI	0.433	0.040	***	0.661	
IFI	TLI	CFI	RMSEA	SRMR	
0.942	0.932	0.942	0.060	0.055	

Table 4 shows that each of the paths was significant and yielded positive movement. Thus, showing that the independent variables PU, AB, and ITBI are mediated by C to AI. Table 4 indicators show that all parameters fulfil model fit requirements. Therefore, it can be concluded that the conceptual model is viable. As such, the discussion for the study follows.

5. DISCUSSION

This study set out to measure the route towards advocacy intention for Millennials. Thus, what could smartphone companies do to enhance the advocacy intention of Millennials in regard to the social media pages of smartphone brands? A relatively high mean was found in the case of each variable, the lowest being perceived usefulness (mean = 4.616), indicating that there were positive attitudes regarding each of the variables. Therefore, Millennials found social media useful and anticipated several benefits to making use of social media pages of smartphone companies. Moreover, they had the intention of being involved in social media pages, which shows that Millennials prefer to be involved on social media pages. Next, they showed a positive attitude towards commitment, which showed that Millennials want to be committed to a brand and to its social media pages. They want to embrace that page and make the brand their own. Lastly, they showed the most positive attitude towards advocacy intention (mean = 5.072), which indicates that Millennials are open to being verbal about their preferences and would involve and motivate others to take part and become involved as well. This shows the importance of involving Millennials and the importance of

delivering on promises. Organisations should make use of the fact that Millennials are willing to spend time on brands and are willing to motivate others towards using a brand. Moreover, as millennials are willing to defend brands and brand pages, organisations should offer useful sites that have benefits that are worth making an effort for.

All variables showed sufficient and significant correlation towards one another, which indicates the importance of upholding each aspect of the variables as diminishing one variable would lead to the diminishment of other variables. The model as per Figure 1 shows that the first parts to advocacy intention are perceived usefulness, anticipated benefits, and intention to be involved. Perceived usefulness is important as it shows that individuals should consider social media to be important and useful in their everyday lives. Thus, targeting those to whom social media hold no importance may prove futile. However, like Facebook, for example, now has 2.38 billion monthly active users (Zephoria, 2019), there appears to be no shortage of individuals making use of social media. Moreover, Millennials are some of the most prolific social media users (Smith & Anderson, 2018). Next, there should be certain benefits to making use of a brand's social media pages. The study showed competitions and special offers as especially important. However, respondents also indicated benefits as a general term, thus indicating that benefits were important, though it would then be the onus of the organisations or smartphone brand to find out which benefits are sought from them specifically.

Intention to be involved showed that there were several reasons why Millennials make use of social media pages, beyond benefits. These were that they wanted to communicate with the brand, connect, network, and keep track of the brand. Therefore, communicating with followers, posting news, and answering questions will motivate those who are positive about the brand to transition towards committing to the brand. Moreover, they indicated that they would feel a sense of duty towards the brand and invest time and energy to support the social media pages of the brands they care for. When all these factors have been successfully managed, Millennials could become advocates for the brand, which would have them defend the brand, talk about it in person and online, and motivate others to use the brand. This is the ideal state for a customer to be in, for brands.

6. RECOMMENDATIONS

Organisations who want to focus on social media as an important aspect for their marketing efforts, especially smartphone brands, must reach out to those who are already on social media. This would focus on individuals who see social media as useful and would concentrate the organisation's marketing effort on social media sites that are frequented by many. Larger organisations may be able to afford using many social media pages; however, this is not the case for smaller organisations, and they may see benefit from starting with Facebook, as it has many frequent users. Next, there should be visible benefits to those who make use of social media pages of brands. Competitions and special offers are but two options, however, brands can offer news, support, content, among other features. Furthermore, when brands make use of social media pages, their followers can help others, mitigating the need for high numbers of social media officers. Commitment is the first focus of the model; therefore, when the other variables are achieved, commitment becomes the first goal. Millennials showed that they were willing to put in the effort for the social media pages of brands, which is a crucial aspect to make use of. Lastly, advocacy intention could be achieved when the other aspects of the model are achieved. Advocacy is the golden standard for loyalty and provides followers who are eager to help the brand grow and achieve at little to no cost. These individuals should be fostered and cared for as they will help others towards advocacy as well.

Practically, this means that businesses, large or small, should have a social media presence, preferably on Facebook and others, where viable. Businesses should then ensure that they ask their growing community what it is they want from the social media page/s. After this information has been collected, the business can then work towards providing what the individual wants. Ideally, this will include content, news, competitions, communication, and online help. When this part has proved successful and a formula has been achieved for motivating individuals towards commitment, satisfying the social media site's audience can then lead to advocacy intention. When this advocacy intention has been reached, the business can focus on enabling those advocates to talk to, motivate, and convince others of the social media sites and products/services of the business.

This study shows the path smartphone brands can take to foster a sense of advocacy intention in Millennials. The sample size of 512 shows a representative

view which provided a successful model to be used. Perceived usefulness, anticipated benefits, intention to be involved, commitment, and advocacy intention, as a five-factor model shows that it is a robust tool that can be used by any smartphone brand and can possibly be adapted to other organisations who wish to improve their social media marketing efforts. This study showed that Millennials have positive attitudes towards social media, want benefits when making use of social media sites, are willing to be committed to brands and their social media pages, and are willing advocates. With the democratisation of technology as well as the proliferation of smartphone brands; it is important to find a differentiating factor to both reach potential customers, but also to convince them of using the brand. This study showcases a route that smartphone brands can take to reach this differentiating factor.

This study had various shortcomings in that it focussed on Gauteng and only made use of university students. Moreover, a non-probability convenience sampling method was used to save time. Future studies may use the data gleaned from this study and use it in a comparative study in other provinces or internationally. Moreover, other studies may focus on Generation Z, who follow Millennials (Generation Y), to gain knowledge regarding the next important generation, but also to compare the generations. Lastly, should this study be conducted on both Generation Z and X, the researcher may be able to find a trend in the data to base future inferences on.

REFERENCE LIST

- Abeysekera, N. 2017. The impact of social media on relationship marketing – with special reference to ABC company. *Zenith International Journal of Multidisciplinary Research*, 7:17-26
- Appiah, D. Ozuem, W. & Howell, K.E. 2017. Brand switching in the smartphone Industry: A preliminary study. (In Delener, N. & Schweikert, C. eds. *Changing business environment: Gamechangers, opportunities and risks*. Austria: Global business and technology association. p. 8-12).
- Badrinarayanan, V. & Laverie, D.A. 2013. The role of manufacturers' salespeople in inducing brand advocacy by retail sales associates. *Journal of Marketing Theory and Practice*, 21(1):57-70.
- Balakrishnan, B.K.P.D., Dahnil, M.I. & Yi, W.J. 2014. The impact of social media marketing medium toward purchase intention and brand loyalty among Generation Y. *Procedia - Social and Behavioral Sciences*, 148(2014):177-185.

- Berry, J. 2018. Getting commitment from Generation Y. <https://timelesstime.co.uk/knowledgebase/getting-commitment-from-generation-y> Date of access: 01 Nov. 2018.
- Bhasin, K. 2011. The 20 brands with the most loyal customers. <http://www.businessinsider.com/brand-loyalty-customers-2011-9> Date of access: 20 Oct. 2016.
- Bugembe, J. 2010. Perceived usefulness, perceives ease of use, attitude and actual usage of a new financial management system. Kampala: Makerere University (Master's dissertation).
- Bush, A.J., Martin, C.A. & Bush, V.D. 2004. Sports celebrity influence on the behavioral intentions of Generation Y. *Journal of advertising research*, 44(1):108-118.
- Casalo, L.V., Flavian, C. & Guinalui, M. 2010. Relationship quality, community promotion and brand loyalty in virtual communities: Evidence from free software communities. *International Journal of Information Management*, 30:357-367.
- Cassavoy, L. 2018. What makes a smartphone smart? <https://www.lifewire.com/what-makes-a-smartphone-smart-579597> Date of access: 27 Jul. 2018.
- Chan, Y.H. 2003. Biostatistics 101: Data presentation. *Singapore Medical Journal*, 44(6):280-285.
- Clark, A. 2015. Mobile phones have changed the world, for better or worse. <https://www.theguardian.com/commentisfree/2015/jan/03/mobile-phones-have-changed-world-for-better-or-worse> Date of access: 29 Oct. 2018.
- Elkaseh, A.M., Wong, K.W. & Fung, C.C. 2016. Perceived ease of use and perceived usefulness of social media for e-Learning in Libyan higher education: A structural equation modeling analysis. *International Journal of Information and Education Technology*, 6(3):192-199.
- George, D. & Mallery, P. 2016. IBM SPSS statistics 23 step by step: A simple guide and reference. 14th ed. New York: Routledge.
- Gibson, R. 2015. Marketing to Generation Y. Just get the basics right! <http://www.generationy.com/marketing-to-generation-y-millennials> Date of access: 19 Mar. 2018.
- Hennig Thureau, T., Gwinner, K.P. & Gremler, D.D. 2002. Understanding Relationship marketing outcomes: An integration of relational benefits and relationship quality. *Journal of Service Research*, 4(3):230-247.
- Hudson, S., Roth, M.S., Madden, T.J. & Hudson, R. 2015. The effects of social media on emotions, brand relationship quality and word of mouth: An empirical study of music festival attendance. *Tourism Management*, 47(2015):68-76.
- Illiff, R. 2018. This Fashion Brand Has Built a Fanatical Following by Being Up Front With Its Politics. <https://www.entrepreneur.com/article/321889> Date of access: 14 Feb. 2019.
- IS (Illinois State). 2010. SPSS: Descriptive Statistics. <http://psychology.illinoisstate.edu/jcutti/138web/spss/spss3.html> Date of access: 05 Jul. 2018.

- Jackson, D. 2017. 10 Social media branding strategies every business should follow. <https://sproutsocial.com/insights/social-media-branding> Date of access: 19 Apr. 2018.
- Jakubowitz, L. 2017. Plugged in with purpose: How to engage millennials in advocacy. <https://phone2action.com/blog/2017/plugged-purpose-engage-millennials-advocacy> Date of access: 01 Nov. 2018.
- Jesensky, J. 2013. Why are smartphones so important in daily life? <http://www.trffcm.com/topics/why-are-smartphones-so-important-in-daily-life> Date of access: 14 Apr. 2018.
- Kaplan, A.M. & Haenlein, M. 2010. Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53:59-68.
- Kietzmann, J.H., Hermkens, K., McCarthy, I.P. & Silvestre, B.S. 2011. Social media? Get serious! Understanding the functional building blocks of social media. *Business horizons*, 54:241-251.
- Kim, A.J. & Ko, E. 2012. Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65:1480-1486.
- Laux, F.L. 2000. Addiction as a market failure: using rational addiction results to justify tobacco regulation. *Journal of Health Economics*, 19(4):421-437.
- Lee, K.Y., Hsu, Y.C., Chen, M.H. & Huang, H.L. 2010. How collaborative communication to promote the satisfaction and loyalty of franchisees: Exploring the moderating effect of net profit. *Asia Pacific Management Review*, 15(4):567-584.
- Liaw, S.S. & Huang, H.M. 2013. Perceived satisfaction, perceived usefulness and interactive learning environments as predictors to self-regulation in e-learning environments. *Computers & Education*, 60:14-24.
- Lin, K.Y. & Lu, H.P. 2011. Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, 27:1152-1161.
- McCarthy, E. 2017. Employee engagement: The Millennial challenge. <https://impact.webershandwick.com/employee-engagement-the-millennial-challenge-cf68ba2cc15f> Date of access: 01 Nov. 2018.
- Meekma, K. 2017. What do customers want <https://www.alume.nl/en/blog/2289-what-do-customers-want> Date of access: 29 Mar. 2018.
- Merriam-Webster. 2016. Social media. <https://www.merriam-webster.com/dictionary/social%20media> Date of access: 14 Feb. 2019.
- Moore, K. 2017. 5 Reasons why Millennials struggle with commitment. <https://thecusp.com.au/5-reasons-millennials-struggle-commitment/18003> Date of access: 01 Nov. 2018.

- Moretti, A. & Tuan, A. 2013. Social media marketing and relationship marketing: Revolution or evolution? A first step analysis. *Sinergie Italian Journal of Management*, 249-264.
- Mostert, P.G., Petzer, D.J. & Weideman, A. 2016. The interrelationships between customer satisfaction, brand loyalty and relationship intentions of Generation Y consumers towards smart phone brands. *South African Journal of Business Management*, 47(3):25-34.
- Nanji, A. 2017. The most popular social networks with Millennials, Gen X, and Baby Boomers. <https://www.marketingprofs.com/charts/2017/31792/the-most-popular-social-networks-with-millennials-gen-x-and-baby-boomers> Date of access: 29 Oct. 2018.
- Nusair, K., Bilgihan, A., Okumus, F. & Cobanoglu, C. 2013. Generation Y travelers' commitment to online social network websites. *Tourism Management*, 35:13-22.
- Oxborrow, I. 2018. World's most popular smartphone brands, Q3 2018. <https://www.thenational.ae/business/technology/world-s-most-popular-smartphone-brands-q3-2018-1.799408> Date of access: 14 Feb. 2019.
- Parrish, R. 2015. 6 Things Apple did not invent <http://www.applegazette.com/feature/6-things-apple-did-not-invent> Date of access: 03 Jan. 2018.
- Pasquarelli, A. 2017. Marketer's millennial dilemma. <http://adage.com/article/news/millennials/310152> Date of access: 19 Mar. 2018.
- Peters, B. 2019. 8 Tips to quickly master social media for businesses & entrepreneurs [SSM065]. <https://blog.bufferapp.com/social-media-for-businesses> Date of access: 14 Feb. 2019.
- Philips, C. 2014. How Smartphones Revolutionized Society in Less than a Decade. <http://www.govtech.com/products/How-Smartphones-Revolutionized-Society-in-Less-than-a-Decade.html> Date of access: 07 Feb. 2018.
- Rauniar, R., Rawski, G., Yang, J. & Johnson, B. 2014. Technology acceptance model and social media usage: An empirical study on Facebook. *Journal of Enterprise Information Management*, 27(1) 6-30
- Reid, R. 2011. The 7 worst fanboy groups on the Internet. <https://www.cnet.com/news/the-7-worst-fanboy-groups-on-the-internet> Date of access: 20 Oct. 2016.
- Renny, A., Guritno, S. & Siringoringo, H. 2013. Perceived usefulness, ease of use, and attitude towards online shopping usefulness towards online airlines ticket purchase. *Procedia - Social and Behavioral Sciences*, 81:212-216.
- Rouse, M. 2018. Smartphone. <https://searchmobilecomputing.techtarget.com/definition/smartphone> Date of access: 04 Oct. 2018.
- Sahin, A., Zehir, C. & Kitapç, H. 2011. The effects of brand experiences, trust and satisfaction on building brand loyalty; an empirical research on global brands. *Procedia Social and Behavioral Sciences*, 24:1288-1301.
- Schmitt, B. 1999. Experiential marketing. *Journal of marketing management*, 15(1/3):53-67.

- Smith, G. 2015. Thanks to--you guessed it--social media, brand loyalty is higher than ever among the generation advertisers can't get enough of. <https://www.inc.com/geoff-smith/millennials-becoming-more-loyal-in-era-of-consumer-choice.html> Date of access: 7 Mar. 2018.
- Smith, A & Anderson, M. 2018. Social Media Use in 2018. <https://www.pewinternet.org/2018/03/01/social-media-use-in-2018> Date of access: 7 Mar. 2019.
- Statista. 2018f. Number of smartphone users in Germany from 2015 to 2022 (in millions)*. <https://www.statista.com/statistics/467170/forecast-of-smartphone-users-in-germany> Date of access: 14 Feb. 2019.
- Stein, J. 2013. Millennials: The me me me generation <http://time.com/247/millennials-the-me-me-me-generation> Date of access:13 Mar. 2018.
- Taylor, V. 2014. Common social media pitfalls for businesses (and how to avoid them): Part 1. <https://www.simplycast.com/blog/social-media-pitfalls-for-businesses-how-to-avoid-them-part-1> Date of access: 05 Nov. 2016.
- Thominathan, S & Ramayah, T. 2014. Ensuring continued usage of an e-government service in Malaysia: The role of perceived usefulness and user satisfaction. *Researchgate*, 73-90.
- Tingley, C. 2015. Social media marketing strategies to engage Generation Y consumers. Walden University. (Doctoral dissertation).
- Tsimonis, G. & Dimitriadis, S. 2013. Brand strategies in social media. *Marketing Intelligence & Planning*, 32(3):328-344.
- Wallace, E., Buil, I, & De Chernatony, L. 2014. Consumer engagement with self-expressive brands: Brand love and WOM outcomes. *Journal of Product & Brand Management*, 23(1):33-42.
- Walter, A., Muller, T.A., Helfert, G., Ritter, T. 2003. Functions of industrial supplier relationships and their impact on relationship quality. *Industrial Marketing Management*, 32:159:169
- Weisberg, J., Te'eni, D. & Arman, L. 2011. "Past purchase and intention to purchase in e-commerce: The mediation of social presence and trust", *Internet Research*, 21(1):82-96.
- Willis, A. 2017. 6 Ways social media changed the way we communicate. <http://circaedu.com/hemj/how-social-media-changed-the-way-we-communicate> Date of access: 16 Nov. 2018.
- Yan, C. 2013. How to get more followers and likes: Advice from 7 social media pros. <http://www.postplanner.com/get-more-followers-and-likes-6-women-social-media-influencers> Date of access: 05 Nov. 2016.
- Zephoria. 2019. The top 20 valuable Facebook statistics. <https://zephoria.com/top-15-valuable-facebook-statistics> Date of access: 26 May. 2019.

ENHANCING SUSTAINABLE LIFELONG LEARNING THROUGH COMPETENCY BASED EDUCATION AND TRAINING IN ZIMBABWE POLYTECHNICS

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–Abstract–

This paper looks at Competency Based Education and Training (CBET) as a mechanism of imparting skills to learners. The paper further justifies CBET as an alternative route for Technical Vocational Education and Training (TVET) in public institutions in Zimbabwe. Over the years and recently CBET has proved to be the conduit of skills development and training that produces competent graduates capable of creating employment and promoting sustainable economic growth. TVET is capable of producing specialist practitioners for the various levels of the productive and service sectors in all the sectors of the economy. The paper advanced how competency-based education can be used as a conduit to enhance sustainable life-long learning capable of creating employment through entrepreneurship and meeting industry demands. CBET is viewed as a reform mechanism of skills development for life-long learning. For this study documentary analysis of literature was used to determine the relevant source of material for review. The selected literature, which included policy documents, journal articles and search engines were critically analysed. Document analysis of reviewed literature became the main source of information and data about TVET in public institutions. CBET is a wholesome mode of delivery which links all the three domains of learning namely psychomotor, affective and cognitive and enables graduates from this system to effectively operate in both formal and informal sectors of the economy for their livelihoods and the development of the nation at large. The training system is guided by international trends of industrialisation and modernisation; hence the paper proposes a TVET system driven by CBET that focuses on skills development anchored on continuous assessment, on the job training and innovation. In conclusion, the study established CBET as an effective mode of equipping trainees with sustainable lifelong competencies for self-reliance and economic growth. For this reason, CBET can be adopted as a useful means of growing the economy through formal and informal entrepreneurial income generating projects.

Key Words: competency; entrepreneurship; life-long learning; sustainable; skills development

JEL Classification: 121

1. Introduction

Education in general gives individuals knowledge which empowers them with means to navigate the various, facets of life. In this context education equips individuals with knowledge, skills and attitudes that enable them to come up with better decisions about life, hence it is acknowledged as a means for transforming and empowering communities (Okwelle & Ayonmike, 2014:185). This makes education a self-empowerment tool. Turkkahraman, (2012:1) assert that education is a means to sustain individual and societal improvement. It is with this in mind that education and training has to raise sufficient number of efficient people for prosperous individuals and societies. Institutions have been given the role of educating and training that has benefits for individuals in their lives. It is against this background that this paper attempts to come up with ways of how Competency-Based Education and Training (CBET) can enhance lifelong learning that provides skills to graduates that can sustain their lives beyond any means of learning. The absence of a sustainable life after formal employment or learning has resulted in people failing to live descent lives through engaging in income generating projects anchored on the skills acquired during training. It is envisaged that a practical oriented skills based education system will equip graduates with necessary capabilities to sustain their livelihoods that enhance the standard and quality of life. Such an education and training system is important and of benefit to those who undertake it as way of combating poverty alleviation and unemployment (Obwoye, 2016:539). The concept of competency-based education and training (CBET) may be viewed as a way of perpetuating lifelong learning as learners continuously upgrade their skills at every available opportunity (World Bank 2002). The education system of any country basically aims to equip the populace with requisite skills and knowledge that respond to demands from industry leading to the development of the economy of the country at large. For this reason, competency based education and training is considered the appropriate training process comprised of skills development and training that relate to a wide spectrum of occupational fields (Report on TVET Policy Review Framework, 2005:18). The system has proved to be the basis of skills development and training that produces competent graduates capable of creating employment and promoting sustainable economic growth. TVET as a learning process is capable of producing the sector specific practitioners for the various levels of the productive and service sectors in the formal and non-formal sectors of the economy. The characteristics of TVET and CBET blend supposedly well to promote skills development and lifelong learning. This paper was guided by the following main research question: *How can CBET be used as a conduit to enhance sustainable life-long learning capable of creating employment and self-sustenance through entrepreneurship?*

2. Research Methodology

The paper employed a qualitative approach and used purposive sampling to select literature on CBET. A critical document analysis of relevant literature sources that included published peer reviewed journal articles and policy documents was carried out.

3. Results and discussion

The rate of unemployment in Zimbabwe has risen to alarming and unfrequented levels in the range of over 90% (Mpofu & Chinhenga, 2016:8). This inspired the basis of this undertaking with a view of proffering solutions through a responsive education and training system. This education system has proven records locally, regionally and internationally. According to Ayonmike et al, (2014:290) TVET in their study of CBET in TVET: Implications for Sustainable

National Security and Development, noted that an education system anchored on CBET is the panacea for growing unemployment numbers especially in developing countries. The authors further reiterated that the absence of employable skills in TVET exacerbates the unemployment levels. The unemployment levels have increased poverty among the populace especially the youth. This status quo has led youths to engage in elicited behaviour especially to do with toxic substance abuse (Zinhumwe, 2012). However, a well-managed TVET system blended by CBET equips graduates or school leavers with skills for survival as adults. Okwelle and Ayonmike, (2014:186) in their study on the Role of TVET for Sustainable Development concluded that, since education is considered the key to effective development strategies, technical and vocational education and training (TVET) is the master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life for all and help achieve sustainable development. It is believed that such an education and training system plays a complimentary role with learning acquired non-formally and formally. OECD, (2018) note that education has an important part to play in developing the knowledge, skills, attitudes and values that enable individuals to contribute and benefit from a wide array of societal issues. Such type of education prepares young people for the world of work (formal and non-formal) through equipping them with the skills they need to become active, responsible and engaged citizens.

The Government of Zimbabwe (GoZ) like other African countries has also embarked on radical reforms through its Ministry of Higher and Tertiary, Science and Technology Development. The government and its cooperating partners continue to fine tune its TVET based on CBET concept which is credit based on practical skills (Woyo, 2013:182). As part of its training strategies trainees undergo on the job attachment stints as part of ensuring and deepening trainees' skills acquisition. To achieve this special departments have been deliberately created under Quality Assurance and Standards viz; Curriculum Research and Development (CRD) and National Examinations (NE) as a way ensuring quality is upheld. CRD is seized with developing occupational standards and skills proficiency schedules using industry experts as a way of narrowing the gap between institutional education and industry (Woyo, 2013:185). This move has been spurred by a continuous assessment model meant ensure mastery of knowledge, skills and attitudes necessary to perform various set tasks. This connects very closely with the idea of lifelong learning.

Lifelong learning is a phenomenon that can sustain skills development in individuals in their entire lives. This acts as a basis for ingenuity based on the acquired skills, promoting an enabling platform for trainees to showcase individual potential (Tuxworth, 1994:109). The emphasis is the ability to keep on learning for an individual's lifetime. The afore said issues can be augmented by a solid base anchored on CBET and training that help support skills learnt formally in college or non-formally through socialisation and work places. It is envisaged that CBET forms the bedrock of lifelong learning that can sustain lives. The European Commission in (2000:19) established that learning through life experiences or lifelong learning has individual benefits which include self-affirmation, inclusivity, responsibility and self-reliance. In line with this assertion, a combination of CBET and TVET play a pivotal role in improving and providing solutions to societal pressing needs especially those that have to do with skills development through formal and non-formal lifelong learning (Norton, 1987). This can be achieved through a clear vision for the people's development through learning that sustains lives beyond active or formal employment. The Regional Forum of Southern Africa on Technical and Vocational Education and Training (TVET) (2016) noted that CBET is synonymous with TVET as it aims to equip the young with the necessary skills that promote employment creation opportunities. The

UNESCO TVET Strategy for the period 2016-21 aims to make the 2030 Sustainable Development Agenda a reality through its alignment to the Sustainable Development Goals (SDGs). SDG 4 advocates for the international community to guarantee an all-encompassing, non-discriminatory and impartial quality education that promotes skills development for all. Three targets under SDG 4 clearly spell out the importance of TVET which in essence is a byproduct of the competency-based education and training (CBET), as an implementation strategy. Preston (2017:10) concurs and notes that CBET is now being packaged as an essential method of lifelong learning where change in behavior through learning is assessed through set standards.

Obwoye (2016:540) emphasise that the most important characteristic of CBET is that it measures learning as opposed to the traditional system which is time based. Preparations begin with identifying competencies (knowledge, skills and attitudes) and the learning process is step by step which provides the necessary guidance and support for mastery. Zimbabwe in 1990 developed the Rationalisation of Vocational and Technical Education policy which set the TVET policy in the country (World TVET Database Zimbabwe, 2012:5). This marked the beginning of a shift towards the adoption of CBET. As a follow up in 2005 the Ministry of Higher and Tertiary Education published a review of the TVET system (World Database Zimbabwe, 2012:5). Both documents came up with a wide array of recommendations that guided the development of TVET in Zimbabwe. It was at this juncture that polytechnic education began offering CBET education and training that emphasised acquiring competencies. This saw the establishment of higher education and examinations council (HEXCO) which presided over examinations in polytechnics and department of Industrial Training and Trade Testing which recognise prior learning (World TVET Database, 2012:6). This arrangement took care of individuals who had acquired some experience through on the job training without any secondary formal qualification (Report on the TVET Policy Review Framework, 2005:16; World TVET Database Zimbabwe, 2012:6).

3.1. Learning for life

Viewed from a simple point of view, lifelong learning is all that learning that is pursued throughout individuals' lives. This is learning that is malleable, varied and available at different times and places (Kennedy et al, 2018:30). Literature has it that lifelong learning cut across all sectors of the economy while promoting learning that goes beyond old-fashioned or traditional schooling throughout one's adult life (Elfert, 2015:89). Watson (2003:5) concurs and aptly says lifelong learning is a process that encourages individuals to acquire knowledge, values and skills through real life experiences during their lifetimes. The World Bank (2002:15) sums up lifelong learning as a system that includes all the learning that individuals go through from early childhood to retirement. Furthermore, it is learning done through formal learning channels in schools, training institutions and universities while non-formal learning is on the job and household training.

This type of learning from a household perspective is attained through socialisation or learning through imitation as learners copy from family members or people in the community. In this regard, lifelong learning can be summed up as learning that has an inclusive approach which includes formal and non-formal settings. A combination of CBET and lifelong learning would spur individuals to perfect skills development that can give rise to projects that stimulate individual and community development (World Bank, 2003:16).

3.2. Training for skills development

Human capital development anchors the development process of any developing and progressive economy, thus CBET provides the platform to produce artisans in various sectors of the economy. This can be achieved through the integration of CBET and TVET as key ingredients to of developing a skilled technical and entrepreneurial workforce for sustainable national development (Ayonmike et al, 2014:291). It is, therefore incumbent that, training for skills development anchored on vocational education requires a model that is relevant to the needs of the industry and individuals who seek to survive on acquired skills. Emphasis should be in learning that is practical and competency based. Examples, that promote this type of learning is apprenticeship training that has the bigger part of the training programme focused on solving real life concrete situations rather than abstract learning (Report on the TVET Policy Review Framework 2005:17). Woyo (2013:186) agree that, CBET is a method to training in which skills are acquired based on a proficiency schedule, knowledge acquired through defined standards and attitudes measured through the aesthetic values one attaches on a completed task. The emphasis to this approach to learning and teaching is more focused on learning concrete skills than abstract learning (Ayonmike, Okwelle & Okeke 2014:123). The trio further point that learning in this approach puts emphasis on learners mastering one competency at a time and proceeding to the more complex skills step by step.

The approach allows learners to progress to next levels when they feel ready for assessment on a particular competency. From the foregoing, CBET can be considered as a suitable approach for training in Technical and Vocational Education (TVET) because the approach is oriented towards the real world of work that emphasise the acquisition of lifelong skills. CBET delivery systems are therefore well placed to train the skilled and entrepreneurial workforce that is needed to create wealth and reduce poverty. It is in this view that CBET as a way of approaching vocational training places emphasis on what a person can actually do in practice as opposed to theory (Sullivan & McIntosh, 1996:95). It is concerned with training to industry specific standards rather than with an individual's achievement relative to others in a group (Kaaya, 2012:84).

CBET can be used as a vehicle to produce practically oriented graduates; this therefore implies that TVET using the CBET approach can respond, to the needs of different industries requirements and those of the training needs of learners, preparing them for gainful employment and sustainable livelihoods (Woyo, 2013:185). It is against this backdrop that there is need to align the curriculum to the current dispensation of bridging the gap between what is taught at college and the real world of work. This is presumed to be a vehicle that produces practically oriented graduates who are functional throughout their lives. Ideally CBET requires that intended outcomes be derived from industry from a spectrum of economic sectors, stressing on the specification, measurement and mastery of competencies. CBET approach also entails that learning be student centred and flexible, allowing learners to progress at a steady pace around real-life situations through problem solving techniques (Brown, 1994:2).

3.2.1. Lifelong learning for sustainable life style

Traditionally, emphasis has been on the benefits of formal education ignoring the fact that learning is entirely a natural process (Brine, 2006:649). This point to the fact that in everything that one engages in, there is some learning that goes on as individuals interact and skills acquisition becomes natural. Piaget a popular psychologist says learning is inherent and begins

even before birth. The argument is that learning in such circumstances depends on curiosity, desire to explore and manipulate things around coupled with the ability to grasp new ideas and skills. Clark, (2005:47) says this is learning through socialisation where knowledge and skills are passed from generation to generation. This notion makes non-formal education lifelong which needs to be harnessed and integrated into the mainstream formal education and training system to produce self-reliant and innovative individuals.

People learn with the help of educators, schools, and educational bureaucracies. This makes learning primarily a social activity. First major learning achievements after birth like walking and talking are impossible without the stimulation and encouragement of parents, siblings or other adults. All subsequent learning depends on interaction with others, either directly or indirectly (e.g. through books or other media). Most of this is done through formal education. This kind of learning system achieves its greatest success at very early stages in life that is, learning to read and write. This remarkable accomplishment almost always requires the intervention of a professional educator using a formal system of instruction and forms the basis for a good deal of our subsequent learning (STEP Report Series 1: Southern Africa Regional Forum on Technical and Vocational Education and Training).

3.2.2. The limitations of formal education

All nations around the world have committed substantial investments in education, for social and economic reasons. For most developed countries, formal schooling for young people begins at tender ages and continues until adulthood. From as early as six(6) to twenty four years learning at this age group primarily takes place in educational institutions, from primary and secondary to tertiary levels. Family life, social organizations, religious institutions and mass media have a role in learning during this time (Laal, 2011:475). However formal learning at this stage has its own share of problems.

Formalised learning presents problems, like that of sustainability, as this type of learning aims to sharpen the cognitive domain rendering other domains useless as there is lack of knowledge transfer that link skills learned in school to real life situations in the outside world (Deißinger & Hellwig, 2005:8). While it is easy to see how such basic skills as reading and writing can be applied in a wide range of contexts, as education becomes more specialised it transfers less readily to new situations. Modern-day higher education has become highly specialised and only a small number of graduates has access to careers which require specialised knowledge and skills. This situation is further complicated by the ever changing nature of professional knowledge and practice, which makes a good deal of what is learned in formal education rapidly redundant or obsolete. Thus, in a swiftly changing world, the ideal situation is one which promotes skills development. This seems a reliable remedy for the promotion of flexible learning needed to tackle a wide range of existing, new, unforeseen and complex problems (Sullivan & McIntosh 1996:97; Sampson & Fytros, 2008:155)

3.2.3. Importance of lifelong learning

The essential principle of lifelong learning is that it is a process of a life time or throughout life. In this rationality, lifelong learning is sustainable in that it operates as a self-directed individual initiative. On the other hand formalised learning is central to a dominant figure, a fountain of knowledge handing down facts exuding authority or superiority (Harris, Hobart & Lundberg, 2006). The term lifelong learning was formalised by Edgar Faure through the piece, *learning to be* and was adopted worldwide including UNESCO which was later used as a blueprint for

universal education. The concept ‘lifelong learning’ was adopted to represent the need for equal opportunities for all as a way of ensuring individual self-fulfillment. The idea was proffered to ensure learning is not confined to formal educational institutions only but should also take place in a wide variety of settings that include workplaces and social settings (Ayonmike, Okwelle & Okeke 2014:290). The most important aspect of lifelong learning is that, it enhances social inclusion, active citizenship and individual development and also increases competitiveness and employability as learners continue to seek knowledge and skills (Ates & Alsai, 2012:4092).

3.2.4. Characteristics of lifelong learning

Lifelong learning has characteristics that make it more responsive to real life situations that make it relevant for personal well-being and growth (Laal, 2011:472). This learning process allows learners to plan, monitor and participate in self-evaluation. The learning process is active and assessment is based on feedback for improvement. Furthermore, learning occurs in both formal and informal settings, allowing learners to learn from peers. This makes lifelong learners tackle real life problems and possess skills for life (Laal, 2011:472). It is on this basis that marrying lifelong learning and competency based education and training is logical in building up a complete individual able to come up with income generating projects. Through this learning process learners are exposed to different learning situations that promote integration of ideas from different fields. The learning strategies are also varied and appropriate as needed. This empowers learners to evaluate information from different sources based on the obtaining situations. This learning model stresses acquisition of competencies accompanied by standards informed by relevant knowledge (Ates & Alsai, 2012:4095).

As earlier acknowledged lifelong learning is self-directed as learners are given the latitude to study on their own pace and evaluate own performances. Both teachers and learners play an important role, with educators playing a more facilitating role in the learning process, while learners focus on the execution of skills. The pre-eminent task for educators is to equip learners with the ability to guide their own learning throughout their lives and in a wide variety of situations encountered after leaving formal education. This is the underlying principle of CBET which allows learners to learn at their own pace.

3. Methods that encourage lifelong sustainable learning

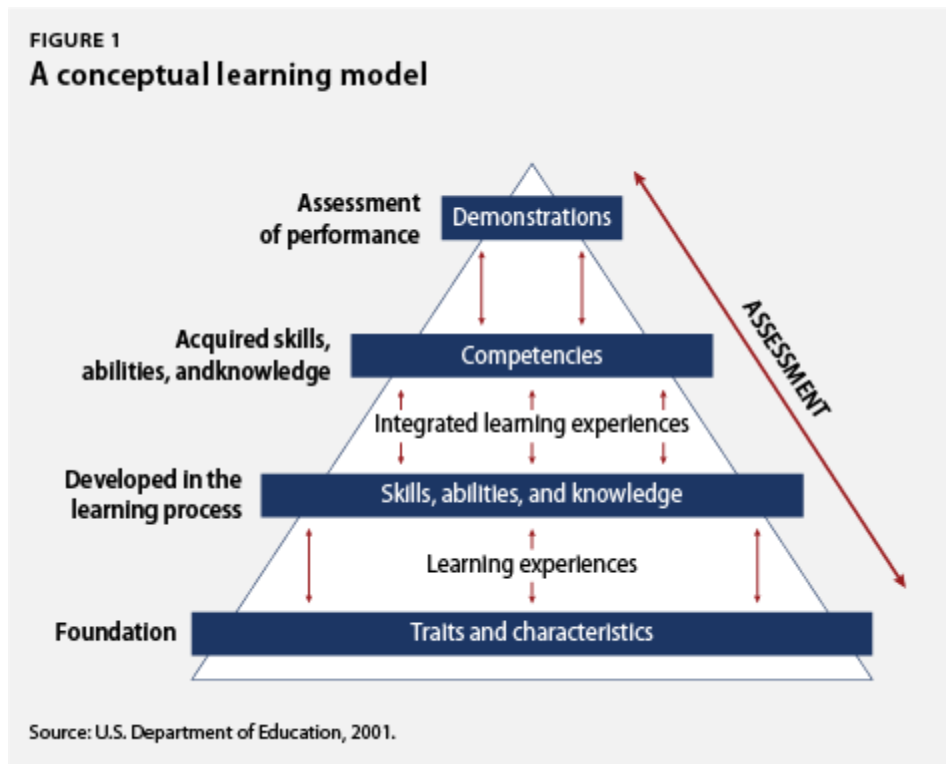
In order to ensure lifelong learning is effective, teaching methods employed should be learner centred which promotes learner activity and task performance rather than just mere acquisition of facts (Deißinger & Hellwig, 2005:10). This should subsequently present meaningful personal interaction between students and teachers. Teachers or educators’ roles become that of guiding, validating, and inspirational role in motivating learners. Furthermore teachers model good learning that help learners develop essential real life skills empowering them to make key life choices. Methods employed should also be interactive as this presents learners with opportunities for collaborative team learning which helps learners to integrate with others as learning in real life always involves working with other people, either directly or indirectly. Again lifelong learning methods should provide more authentic involving tasks performed in natural situations that can lead to change and improvement. Constructive feedback should also be given that include elements of peer and self-assessment, which enable learners to reflect on their performance and make appropriate changes based on those reflections (Deißinger & Hellwig, 2005:54).

Methods employed should encourage integration of information and skills from different fields as most problems in the real world are multi-faceted. These should also take into consideration individual differences among learners as rate of assimilation and mastery of skills differs according to individual ingenuity. Overall, the teaching and learning process should present challenging tasks that are achievable. These present learners with the motivation to want to learn more. This also means the tasks should not be highly pitched as this demotivates learners. It is on this basis that learning outcomes should be agreed between learners and teachers or educators. This includes decisions about the content to be learnt, methods employed and approaches to assessment.

This is the approach used in competency education and training, where learners are informed of the learning outcomes through the availability of skills proficiency schedules and occupational standards (Deißinger & Hellwig, 2005:13). In this case skills proficiency schedules roll out the expected competencies for a specific course. The provision of these two documents coupled with the content outline assist learners work towards the attainment of the set goals. Assessment is continuous with emphasis on skills mastery. This empowers learners to take the responsibility for their own learning. Learners are given countless chances to master given competencies practiced at their own pace.

Figure 1 below summarises an illustration of the competency-based approach.

Figure 1: Competency based education and training approach



Source: Obwoye, 2016:541

5. Characteristics of Competency Based Education and Training (CBET)

There are a number of characteristics of competency-based programs. Important characteristics of this learning model include the following outlined points. To begin with occupational standards are developed which bench mark the occupation using knowledge obtained from practicing experts from industry. This is followed by the crafting of competencies of the occupation which are carefully selected and put on proficiency schedules. The proficiency schedules outline the practical components of the occupation which must be mastered by learners. This helps learners to know the competencies to grasp. Learners are assessed based on the competencies and the information given during occupational standards development. The last phase is when educators, teachers or lecturers help out in the formulation of the content to be taught based on the level set using the level descriptors. This is where relevant theory is integrated with the practical component on the skills proficiency. In other words vital knowledge is used to support the performance of skills. The occupational standards usually state the required training material, equipment and accompanying facilities (Deißinger & Hellwig, 2005:20).

All the three operating documents provide the time required to master the content and the skills. Furthermore mastery of skills is measured through recognition of prior learning which may lead in some instances to exemptions of some subjects. This allows transfer of credits and individual learners mobility from one area to another. Learning under this model is self –paced and can be done in groups of manageable sizes. Completion of a set of competencies is pegged at specific levels which must reveal mastery of both theory and practical components producing an all-rounder who can function under any conditions (Foyster, 1990:3).

6. Benefits of competency-based education and training (CBET)

There is sufficient evidence that the adoption of a Competency Based Training system improves quality and relevance of TVET. Benefits of CBET are numerous but the most important are that; learners achieve competencies required in the jobs through mastery of skills; the mastery of competencies further acts as a way of building confidence in the trainees; training time is utilised efficiently and effectively as the trainees spend more time practicing acquisition of competencies, while the trainer is a facilitator of the learning process as opposed to a provider of information; the training process accounts for every individual ensuring that each learner receives adequate attention through evaluating each participant's ability to perform essential job skills (Woyo, 2013:185).

Competency Based Education Training is a model that tackles unemployment as graduates from this system are able to start self-employment projects because they have acquired the competencies to set up their own businesses or be absorbed by the industries. Therefore, unemployment which other programmes grapple with is not an issue for CBET graduates (Anane, 2012:117). There is no doubt that having gone through CBET, graduates do not simply provide service in the working environment; they accomplish results and this is what the world of work expects from its work force and which the CBET graduates have exhibited. Most graduates from this training background have either gotten formal employment or are self-employed because they have acquired the competencies needed to operate efficiently in their respective professions. These graduates have become the pillar of economic development in both first and third world countries. For example apprentices who underwent similar training are still on demand in African and European countries. These are usually recruited with incentives of

attaining citizenship and lucrative on the job packages. This goes to batterers the point that Competency Based Training is indeed quality delivery for TVET Institutions.

7. Zimbabwe's drive to sustain lifelong learning through CBET in polytechnics

Zimbabwe at independence took a deliberate move meant to sustain lifelong learning through crafting a policy on education with production which was basically meant to produce graduates who could live on the skills gained after training (Maravanyika, 1990:87). This philosophy was meant to bring together theory and practice making school experiences meaningful in terms of real life activities outside the school. It was the government's view was that all learning should encompass practical application used to solve real life problems faced by the people in trying to improve their environment, standard and quality of life (Maravanyika, 1990:89). The main focus of this thrust was aimed at reducing shortages of skilled workers and as a possible solution to the increasing youth unemployment (Mupunga, Burnett & Redmann, 2005:75).

Zimbabwe's polytechnic education offered through its eight (8) polytechnics and two (2) industrial training centres has also transformed its training model, from being course based to become competency based (Woyo, 2013:188). This transformation was in line with the need to bridge the gap between institutions of learning and industry. This was to earn polytechnic training and education a relevance tag from industry as graduates from these institutions performed better than before on being employed by industry (Namaco Joint Meeting Report, 2012). To this end polytechnic education adopted Competency Based Education and Training philosophy. The policy came into being in 1990 (World TVET Database Zimbabwe, 2012:8).

This was meant to promote technical vocational education and training which in principle equips learners with skills and entrepreneurial prowess to come up with self-employment projects. The policy meant that all polytechnics in Zimbabwe run TVET programmes anchored on CBET. The vision was to bridge what was learnt in institutions and the real world of work. This involved the creation of horizontal and vertical linkages with exit points at virtually every level. The TVET curriculum was designed with compulsory courses such as, National Strategic Studies, HIV-Aids Education and Entrepreneurial Skills Development. On the job education and training is also a compulsory course basically meant to ensure learners get the necessary hands on exposure. The process involves on-and off-the job grooming of the trainee by both the institution and the productive and service sectors. Its graduates include skilled operatives, skilled workers, technicians and technologists. TVET graduates are the practical problem-solvers, innovators, leaders and employment creators in any society. The expansion of TVET institutions and programmes has been to address more the predicament of school leavers and dropouts who need to be prepared for productive life after training (21st Century Paper; Hexco General Regulations, 2012).

7.1. CBET in Zimbabwean polytechnic institutions

Zimbabwe has since adopted CBET learning system in its TVET institutions (Woyo, 2013:185). Industry has become an important player through the National Manpower Advisory Council (NAMACO) which council is made up representatives of the twenty sectors of the economy which prevail in Zimbabwe (Report on TVET Policy Review Framework, 2005:18). The key role of the council is to advise government on human capital needs of industry and critical skills gap. Hence, experts from industry help in crafting occupation qualification standards and skills proficiencies for different occupations. The idea was intended to bridge the gap between what is learnt in institutions and the real world of work. Assessment is continuous during the learning

process and external assessors are drawn from industry and involved in the assessment process to ensure the assessment is valid and reliable. Students are also given an opportunity prior, to assessment to know exactly what to expect from the assessment process. This has made the assessment purposeful in that all three main domains of learning namely, cognitive, affective and psychomotor are taken care of; this has led to coining this approach “*cbetisation*” or “*cbetised*” curriculum. The assessment includes portfolios, simulations, interviews and model projects that solve real life problems.

According to HEXCO General Regulations 2012, the practical skills component, which is the continuous assessment, is composed of written tests, field-based projects and a proficiency mark. The final mark is then derived from merging the practical components and final the written examination. The practical component has sixty percent weighting while the written exam has forty percent. This assessment criterion emphasises skills development. The outcome of this has improved on the performance of students in their execution of competencies. As a result, formal and non-formal employment has benefitted from this initiative which is slowly creeping into institutions of higher learning. Engagement by graduates in self-initiated projects has also manifested in Small to medium enterprises (SMEs) in tourism, metal fabrication, hospitality, accounting among others dominate these initiatives (Zimbabwe TVET Policy 1990; HEXCO Report 2017). There has been deliberate promotion of this phenomenon by government through such student programmes as GEEP (Graduate Entrepreneurial Economic Programmes) designed to enhance income generating projects.

8. Conclusion

From the experiences of other countries and policy formulations there is general consensus that Competency Based Training is the ideal education and training model for TVET programmes, as the learning process takes on board skills, knowledge and attitudes necessary to produce an all-rounder after training. The approach has relevance in developing economies which still need to be grown and have to deal with huge numbers of unemployment. However, implementation of this training model requires funding to ensure that relevant training equipment and facilities are in place. Furthermore the training system should be flexible enough to allow students ready for assessment to be assessed as required. However, testimonies from industry about the performance of CBET products is evidence enough that if a nation emphasizes on skills development through competency-based training, there will be sustainable development for industries and the nation as a whole. Therefore, every effort must be made by stakeholders to overcome challenges to do with training facilities and assessment through the adoption of systematic and pragmatic strategies to ensure that the CBET system is sustained. Competency Based Education and Training (CBET) takes all two modes of learning i.e. informal education through recognition of prior learning, on the job education and training and through designed programmes that lead to a qualification which translate to lifelong learning as learners continue to grow in search of knowledge, skills upgrades and qualifications. The inclusion of job profiles, occupational standard development and skills proficiency schedules complete the process taking care of the three domains of learning i.e. cognitive, psychomotor and affective. The emphasis on practical skills makes CBET a tool for life wide and lifelong learning.

REFERENCES

- Anane, C.A. 2013 Competency based training: Quality delivery for technical and vocational education and training (TVET) institutions. *Educational Research International*, 2(2):117- 127. [http:// www.erint.savap.org.pk/PDF/vol2\(2\)/ERInt.2013\(2.2-14\).pdf](http://www.erint.savap.org.pk/PDF/vol2(2)/ERInt.2013(2.2-14).pdf)
- Ates, H. and Alsai, K., 2012. The importance of lifelong learning has been increasing. *Procedia-Social and Behavioral Sciences*, 46, pp.4092-4096.
- Ayonmike, S. Okwelle, P.C & Okeke, B.C 2014 Competency Based Education and Training in Technical Vocational Education: Implication for Sustainable National Security and Development 4 October Vol 1: 290-300
- Brine, J. 2006. Lifelong learning and the knowledge economy: those that know and those that do not—the discourse of the European Union. *British Educational Research Journal*, 32(5):649-665.
- Brown, M. (1994). An introduction to the discourse on competency-based training (CBT) in Deakin University Course Development Centre (Ed.), a collection of readings related to competency-based training (pp. 1-17). Victoria, Australia: Victorian Education Foundation, Deakin University. Retrieved from <http://files.eric.ed.gov/fulltext/ED384695.pdf>
- Clark, T., 2005. Lifelong, Life-Wide or Life Sentence? *Australian Journal of Adult Learning*, 45(1):47-62.
- Competence Models in Technology-Enhanced Competence-Based Learning
- Deißinger, T. & Hellwig, S., 2005. Structures and Functions of Competence-based Education and Training (CBET): A comparative perspective.
- Delker, P.V., 1990. Basic Skills Education in Business and Industry: Factors for Success or Failure. Contractor Report.
- Delors, J., 1998. *Learning: The treasure within*. UNESCO.
- Elfert, M., 2015. UNESCO, the Faure report, the Delors report, and the political utopia of lifelong learning. *European Journal of Education*, 50(1), :88-100.
- Foyster, J., 1990. Getting to Grips with Competency-Based Training and Assessment. TAFE National Centre for Research and Development, Attn: Sales, 252 Kensington Road, Leabrook, South Australia 5068.
- Harris, R., Hobart, B. and Lundberg, D., 1995. Competency-based education and training: Between a rock and a whirlpool. Macmillan Education AU.
- Kaaya, P.B. 2012. The importance of competency-based education and training (CBET) on industrial performance in Tanzania. Paper Presented at the TVET Institutions and Industries Collaborations Conference Program, 12th October, 2012, Arusha Tanzania.
- Kennedy, K. Wanami, S & Kerre, B.W. 2018 Challenges affecting the implementation of technical curriculum in public TVET institutions in Kenya: A case of Nandi and Uasin Gishu counties ISSN 2320-7388 8(3):30-34
- Laal, M., 2011. Lifelong learning: What does it mean?. *Procedia-Social and Behavioral Sciences*, 28, pp.470-474.

Maravanyika, O.E 1990 World Bank Discussion papers Africa technical department Series No 91 Implementing educational policies in Zimbabwe. World Bank ISSN 0259-210

Mpofu, J & Chimhenga, S 2016 Unemployment and Implications to Social and Political Conflict: Perspectives from Zimbabwe. IOSR Journal of Research & Method in Education, 6(3): 08-13.

Mupunga, D.M., Burnett, M.F & Redmann, D.H 2005 Examining the purpose of technical education in Zimbabwe's high schools. International education journal ISSN 1443-1475 Shannon research press

Norton, R.E., 1987. Competency-based education and training: a humanistic and realistic approach to technical and vocational instruction. Regional Workshop on Technical/Vocational Teacher Training in Chiba City, Japan. ERIC: ED (Vol. 279910).

Obwoye, M. 2016 Competency based education and training: A fresh green leaf from the Australian context for TVET in Africa. IRA international journal of education and multidisciplinary studies ISSN 2455-2526, 3(3)

OECD 2018 The future we want: The Future of education and skills education 2030 Directorate for education and skills. 2 rue André Pascal - 75775 Paris Cedex 16-France

Okwelle, P & Ayonmike, C.S 2014 Towards value re-orientation of youths on the role of technical vocational education and training (TVET) for sustainable development in Nigeria. Journal of Education and Practice www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) 5(8)

Preston, J., 2017. Competence Based Education and Training (CBET) and the End of Human Learning: The Existential Threat of Competency. Springer.

Report on the Technical and Vocational Education and Training Policy Review Framework 2005

Sampson D., Fytros D. 2008 Competence Models in Technology-Enhanced Competence-Based Learning. In: Adelsberger H.H., Kinshuk, Pawlowski J.M., Sampson D.G. (eds) Handbook on Information Technologies for Education and Training. International handbooks on information systems. Springer, Berlin, Heidelberg pp 155-177

STEP Report Series Southern Africa Regional Forum on Technical Vocational Education Training (TVET) 2016, Lilongwe

Sullivan, R & McIntosh, N 1996 The competency based approach to training 5(2)

The World Bank 2002. Stepping up skills for jobs and productivity

Turkkahraman, M. 2012 The role of education in societal development. Journal of educational and instructional studies in the world, Volume 2 Issue 4 ISSN 2146-7463

Tuschling, A. and Engemann, C., 2006. From education to lifelong learning: The emerging regime of learning in the European Union. Educational philosophy and theory, 38(4):451-469.

Tuxworth, E. (1994). Competence-based education and training: background and origins. In Deakin University Course Development Centre (Ed.), A collection of readings related to competency-based training (109-123). Victoria, Australia: Victorian Education Foundation, Deakin University. Retrieved from <http://files.eric.ed.gov/fulltext/ED384695.pdf>

Watson, L., 2003. Lifelong learning in Australia. Department of Education, Science & Training.

World Bank (IBRD), 2003. Lifelong learning in the global knowledge economy: challenges for developing countries: a World Bank report. World Bank, Washington, District of Columbia.

World TVET Database Zimbabwe 2012 UNESCO-UNEVOC International centre for technical and vocational education and training

Woyo, E., 2013 Challenges facing technical and vocational education training institutions in producing competent graduates in Zimbabwe 1(7):182-189

Zinhumwe, C. (2012). The youth and unemployment in Zimbabwe. Remarks presented at the National Youth Conference, with the theme, "Building a future with Decent Work for Young People held at Rainbow Towers in Harare on 29 March.

ANTECEDENTS OF RELATIONSHIP INTENTIONS IN SOUTH AFRICAN CONSTRUCTION INDUSTRY BUSINESS-TO-BUSINESS ENVIRONMENTS: A FACTOR ANALYTICAL APPROACH

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–Abstract–

A growing interest in relationship marketing as a practice and research focus has been witnessed over the last two decades and this was spurred primarily by the need to create sustainable competitive advantage in business-to-customer (B2C)

environments. This has prompted marketers to shift their attention from their short-term transactional business approach to more enduring relationship-building strategies. An extant literature review revealed that limited research studies have been conducted in business-to-business (B2B) settings. This study examined the antecedents of relationship intentions in B2B settings in the South African construction industry, in the Gauteng province. The study is imbedded within a post-positivist approach with the use of a quantitative research design. Data were collected from a structured self-administered questionnaire (n=560) from civil and building contractors. Exploratory and confirmatory factor analysis were employed to determine possible factors and to establish the data's goodness-of fit to the model. In addition, the reliability as well as validity of the study's measuring instrument was established.

The findings offer support for an eight-factor structure (flexibility, information sharing, trust, fear of relationship loss, forgiveness, expectations and feedback) with 36 items that explain the antecedents of relationship intentions. Moreover, the confirmatory factor results show satisfactory goodness-of fit of the proposed factor structure to the data. In B2B environments, relational partners can leverage these eight relationship intention strategies in order to enhance their association for business longevity. A comprehensive framework has been proposed, which can be used as an archetype to measure and understand the antecedents of relationship intentions within B2B environments.

Key Words: Concrete products, civil and building contractors, relationship intentions, antecedents and exploratory factor analysis

JEL Classification: M31

1. INTRODUCTION AND CONTEXTUAL SETTING OF THE STUDY

A growing interest in relationship marketing as a practice and research focus has been witnessed over the previous two decades, (Hoppner, Griffith & White, 2015). However, the actual application of relationship marketing as an approach evades most organisations, as the value of the approach is often understated (Wei, Li, Burton & Haynes, 2013). For this reason, Raciti, Ward and Dagger (2013) stress the need for organisations to review their marketing activities to enable only customers who are eager to participate in relationship building to do so.

The prominence of this study is on the South African B2B concrete product environment in the construction industry. The concrete product environment is an important sector that contributes towards the country's infrastructure expansion and economic growth. The public sector accounts for almost 65 percent of the

concrete construction business, while the rest is accounted for by the private sector. The growth and sustenance of the South African concrete product environment is supported by projects in residential and industrial buildings, as well as civil works primarily funded by government (Bbenkele & Madikiza, 2016).

Most concrete product projects are executed by specialist industry role players, which include property developers, architects, project managers, quantity surveyors, materials suppliers, electrical and mechanical engineers, as well as civil and general building engineering contractors (Benton & McHenry, 2010). In South Africa, concrete products are the second-most utilised construction material after water (Bbenkele & Madikiza, 2016). The concrete product environment within the construction industry of South Africa is subjugated by a few large organisations, which partner with smaller organisations in joint venture working arrangements. Hence, the study purpose is to examine the antecedents of relationship intentions in B2B environments within the South African construction industry, in the Gauteng province.

2. LITERATURE REVIEW

Most organisations spend considerable time, energy and resources trying to acquire new customers (Weinstein, 2002). However, it is commonly believed that the cost of attaining new customers is up to five times more compared to keeping existing customers (Lin, 2013). In view of this, Bateson and Hoffman (2011) argue that instead of constantly trying to acquire new customers, organisations should focus on retaining existing customers as it could result in reduced operational and marketing costs, which translates into increased profitability. For this reason, Zeithmal, Bitner and Gremler (2009) opine that the long-term ability of organisations to create sustainable competitive advantage largely depends on how they utilise their resources to satisfy and retain profitable customers. Thus, Malhotra, Uslay and Ndubisi (2008) consider relationships as the bedrock of B2B marketing. Similarly, Roberts-Lombard, Mpinganjira and Svensson (2017) also note that competition has accentuated the importance of relational exchanges in B2B trade relations.

To yield common benefits for the relational partners in the relationship, Segarra-Moliner-Tena and Sánchez-Garcia (2013) underscore the need for trust, commitment, communication, collaboration and joint planning. According to Han and Hyun (2015), once commercial relations are characterised by trust, an atmosphere of open and honest communication is created in which all parties share their relationship expectations. Nabi (2012) adds that, ideal levels of

expectation echo the confidence and desire of customers, so much so, that customers are not prepared to settle for mediocre service standards (Berndt & Tait, 2012). When relationship partners have a sense of shared expectations, Bojei and Abu (2014) note that commitment development and the resultant relationship longevity often translate into sustainable competitive advantage. Moreover, Yu, Cadeaux and Song (2017) argue that if organisations can address flexibility, which can be a critical skill that inspires organisations to serve customers with high quality performance, their outcomes in terms of relational norms would ignite functional-specific performances such as product quality and delivery speed. Thus, information sharing amongst the relational partners is also important as it is supposed to stimulate trust and satisfaction (Wickramasinghe & Weliwitigoda, 2011), which are the ingenious fundamentals of relationship quality (Lin, 2013). When organisations share information with their customers, they become well-versed around certain features of the relationship exchange, which translates into customer satisfaction (Tong & Crosno, 2015).

3. PROBLEM STATEMENT

The successful rollout of government and private sector infrastructure projects largely depends on the proper functioning of the construction materials sector (Bbenkele & Madikiza, 2016). This is hardly the prevailing situation in the South Africa construction industry, which is infiltrated by adversarial relations that are skewed towards a few large organisations (Benton & McHenry, 2010). Although Kumar, Bohling and Ladda (2003) initially proposed that relationship intention should be studied in the B2B setting, to date, most previous relationship marketing studies that took place in South Africa focused mainly on relationship intentions within B2C markets. Comparatively, very little research has explored long-term relationship building intentions in the B2B context, more so within the construction industry. While relational exchanges have been investigated in a range of industries in a B2B context, there is insufficient indication of its use in the South African construction industry.

4. RESEARCH METHODOLOGY

4.1. Research design and methodology

The nature of this study is cross-sectional, embedded within a post-positivist approach.

4.2. Sample and data collection method

In drawing the sample size, the Construction Industry Development Board list of registered organisations was used as a sample frame, wherein 2 567 organisations were listed and a sample size of 600 respondents were selected through a systematic random sampling procedure. The target population of this study comprised civil and building construction organisations operating within the Gauteng province, due to its prominence as an economic hub of the country. Data were collected using a structured, self-administered questionnaire.

4.3. Measuring instrument

The research questionnaire used to gather data covered two sections. Section A contained demographic-related questions. Section B contained the items adapted from the scales of Morgan and Hunt (1994), Kumar *et al.* (2003) and Hsu, Kannan, Tan and Leong (2008) to measure the antecedents of relationship intentions. A five-point Likert-type scale ranging from 1=strongly disagree to 5=strongly agree was employed to measure the items.

5. RESULTS

5.1. Sample composition

An examination of the respondents' demographic profile confirms that a greater part of responses was derived from procurement managers (n=205; 36.6%), followed by site managers (n=125; 22.3%), quantity surveyors (n=75; 13.4%), construction project managers (n=71; 12.7%), managing directors (n=67; 12%), and others (n=17; 3%). The majority of the respondents (n=196,35%) have been supporting their preferred concrete product manufacturer (CPM) for a period of one year or longer, followed by n=120 (21.4%) who supported their CPM for less than a period of one year.

5.2. Exploratory factor analysis (EFA)

Prior to the factor analysis, the Kaizer-Meyer-Olkin (KMO) measure, as well as the Bartlett's test of sphericity were measured to establish if the data were appropriate for factor analysis. Table 1 confirmed that forms of correlation tests were satisfactory and factor analysis was suitable to apply on the data set (Malhotra, 2010). Principal component analysis with varimax rotation was undertaken to establish the factors that contribute to the antecedents of relationship intentions, as perceived by the relationship managers of the civil and building organisations on the data set. Table 1 presents the rotated factor matrix, that demonstrate factors and their items, including the factor loadings.

Table 1: Exploratory Factor Analysis Results

No	Subscale items	Factor loadings	Eigenvalue	Total variance explained	Cumulative variance explained
FLEXIBILITY			10.394	14.645	14.645
1	If a situation where we have different assumptions about our agreement arises, our current CPM is prepared to work out a suitable new deal.	.821			
2	When unforeseen circumstances arise, and we disagree on how to continue, our current CPM is ready to work out an acceptable new deal to both of us.	.821			
3	Our current CPM is open to modify our agreement should unforeseen events transpire.	.807			
4	If our views differ concerning events in our relationship, our current CPM is prepared to develop a common understanding.	.788			
5	Our current CPM is open to the idea of making changes, even after we have made an agreement	.757			
6	In this relationship, our current CPM makes it possible for us to make adjustments to cope with change	.751			
7	Flexibility in response to appeals for changes is a characteristic of our current CPM.	.714			
INFORMATION SHARING/EXCHANGE			4.226	12.778	27.422
8	In our relationship, we are expected to share any information that might assist the other party.	.813			
9	In our relationship, we are expected to continuously inform one another about occasions or events which may affect the other party.	.810			
10	We inform our current CPM beforehand of our changing needs.	.793			
11	We share exclusive information with our current CPM.	.764			

No	Subscale items	Factor loadings	Eigenvalue	Total variance explained	Cumulative variance explained
12	Our current CPM share with us exclusive information (such as, products research development phase).	.728			
13	In our relationship, we are expected to only provide each other with information according to the pre-specified agreements.	.681			
14	Our current CPM keeps us well informed regarding issues that affect our business relationship.	.610			
TRUST			2.578	9.296	36.718
15	In our relationship, our current CPM can be trusted to do what is right.	.747			
16	In our relationship, our current CPM is always faithful.	.706			
17	In our relationship, our current CPM has high integrity.	.673			
18	In our relationship, our current CPM is an organisation that we have great confidence in.	.607			
19	In our relationship, our current CPM can be trusted at times.	.574			
20	In our relationship, our current CPM can be trusted completely.	.544			
21	In our relationship, our current CPM can be trusted at times.	.528			

FEAR OF RELATIONSHIP LOSS			2.113	7.262-	43.980
22	We are concerned to lose quality products of our current CPM by moving to another CPM.	.838			
23	We are concerned to lose our relationship with our current CPM by switching to another CPM.	.817			
24	We are concerned that we may lose special privileges of our current CPM by switching to another CPM.	.814			
FORGIVENESS			1.934	7.182	51.162
25	We will forgive our current CPM if their product quality is lower than the standard, we expect from them.	.830			
26	We will forgive our current CPM should their product quality be lower than the standard of other CPMs.	.788			
27	We will forgive our current CPM should we experience bad service from them.	.799			
INVOLVEMENT			1.707	7.043	58.206
28	We care about the image of our current CPM.	.866			
29	We are proud when we see our current CPM's name or advertising materials.	.817			
30	We are proud to be a customer of our current CPM.	.816			
EXPECTATIONS			1.505	6.275	64.481
31	We expect our current CPM to offer us more value for our money compared to other CPMs.	.886			
32	We expect our current CPMs products to be better than other CPMs.	.839			
33	We expect our current CPM to offer us value for our money.	.837			
FEEDBACK			1.004	6.244	70.725
34	We will tell our current CPM if their products quality meets our expectations.	.818			
35	We take time to inform our current CPM about their product quality with the intent of improving product quality.	.758			
36	We will tell our current CPM if their products are better than what we expect.	.752			

Kaiser-Meyer-Olkin measure of sampling adequacy=0.899; Bartlett's test of sphericity was significant at $p < 0.000$, with chi-square=13077.870 and 630 degrees of freedom. Cumulative explained variance with a seven-dimension structure =70.725 percent.

5.3. Assessment of the measurement model

Following the factor extraction process using the exploratory factor analysis (EFA), the confirmatory factor analysis (CFA) by means of AMOS 24.0 was undertaken to authenticate the measurement model. The study employed the acceptable thresholds of model fit indices recommended by Kline (2011) as shown by Table 2.

Table 2: Measurement Model Fit Results

Fit indices	Acceptable fit indices	CFA results <i>(Measurement model)</i>	Decision
Chi square/degree of freedom (CMIN/DF)	<3.0	2.422	Acceptable
Goodness-of-fit index (GFI)	> 0.90	0.918	Acceptable
Incremental fit index (IFI)	> 0.90	0.904	Acceptable
Tucker-Lewis index (TLI)	> 0.90	0.900	Acceptable
Comparative fit index (CFI)	> 0.90	0.903	Acceptable
Root mean square error of approximation (RMSEA)	< 0.08	0.050	Acceptable

The CFA results confirm that satisfactory results were delivered and the overall fit of the measurement models are acceptable.

5.4. Correlation and descriptive analysis

Prior to using correlation analysis, tests for data normality were conducted. The results confirmed that data were not normally distributed, thus, the non-parametric Spearman’s correlation coefficients (*r*) was computed (Malhotra, 2010). Table 3 presents the outcomes of the correlation analysis.

Table 3: Correlation Matrix and Descriptive Statistics

FACTORS	FLE	INF	TRU	FEA	FOR	INV	EXP	FEE
Flexibility (FLE)	1	.444**	.466**	.430**	.543**	.230**	-.041	.386**
Information sharing/exchange (INF)	.444**	1	.216**	.521**	.377**	.034	-.015	.138**
Trust (TRU)	.466**	.216**	1	.328**	.427**	.438**	.109**	.466**
Fear of relationship loss (FEA)	.430**	.521**	.328**	1	.375**	-.023	-.018	.179**
Forgiveness (FOR)	.543**	.377**	.427**	.375**	1	.072	.029	.255**
Involvement (INV)	.230**	.034	.438**	-.023	.072	1	.131**	.178**
Expectations (EXP)	-.041	-.015	.109**	-.018	.029	.131**	1	.120**
Feedback (FEE)	.286**	.138**	.466*	.179**	.255**	.178**	.120**	1

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 3 unveils results confirming low to moderate yet positive inter-factor correlation associations between the relationship intentions ranging from $r = .015$ to $r = .644$ at $p < 0.01$ (Fornell & Larcker, 1981), indicating the convergence between the antecedents.

5.5. Reliability and validity

Table 4 presents the reliability and validity values of the constructs examined in this study.

Table 4: Composite Reliability and Accuracy Analysis Statistics

Research constructs	Cronbach's alpha test		CR	AVE	Factor loading	Highest SV
	Item-total	Alpha value				
Fear of relationship loss	0.668	0.906	0.90	0.75	0.89	0.41
Trust	0.612	0.830	0.83	0.42	0.69	0.22
Flexibility	0.801	0.942	0.94	0.68	0.78	0.30
Forgiveness	0.809	0.892	0.89	0.74	0.76	0.16
Involvement	0.720	0.838	0.84	0.64	0.81	0.05
Expectation	0.700	0.825	0.83	0.62	0.82	0.02
Feedback	0.660	0.793	0.79	0.56	0.76	0.06
Information sharing	0.644	0.892	0.88	0.50	0.68	0.31

For all measurement items, the Cronbach's alpha coefficient and the composite reliability (CR) values, both surpassed the permissible threshold of 0.70 (Kline, 2011). To verify the construct validity, the EFA was assumed for each antecedent of relationship intentions and item-total correlations of beyond the acceptable benchmark 0.50 were generated. Each of the factor loadings surpassed 0.5 threshold and the average variance extracted (AVE) also exceeded the 0.4 yardstick. The discriminant validity was established using the AVE values which were higher than the shared variance (SV) values consistent with Fornell and Larcker's (1981) validation.

6. FINDINGS AND DISCUSSION

Factor 1, **flexibility** (eigenvalue=10.394), extracted 14 percent as the highest to the total variance explained and comprised seven items with factor loadings ranging from 0.714 to 0.821. This sub-dimension has been viewed as one of the competitive implications that the relational partners ought to consider when either placing their orders or scheduling their operations (Awwad & Almahamid, 2008).

Factor 2, **information sharing/exchange** (eigenvalue=4.226), extracted 12 percent as the second highest to the total variance explained and contained seven items with factor loadings ranging from 0.610 to 0.813. The seven items which loaded onto this factor concentrated on the civil and building contractors and their CPMs inclination to share information about issues that affect their business relationship and keep informing each other about incidents that may affect their

relationships (Tong & Crosno, 2015). This argument resonates with Devlin and Bleackley's (1988:20-21) study, which revealed that information sharing is a significant predictor of relationship continuity.

Factor 3, **trust** (eigenvalue = 2.578), extracted 9 percent as the third highest to the total variance explained and involved seven items with factor loadings ranging from 0.528 to 0.747, which dealt with the respondents' level of trust on their CPMs service delivery and product performance. Liljander and Roos (2002) also found that customer trust is premised on customer accrued fulfilment and consistent delivery of good quality products and services that meets customer needs, and honest and fair treatment toward the organisation's intentions of satisfying customer.

Factor 4, **fear of relationship loss** (eigenvalue = 2.113), extracted 7 percent as the fourth highest to the total variance explained and loaded three items with factor loadings ranging from 0.814 to 0.838. Items which loaded onto this factor include the civil and building contractors' fear of losing quality products, unique privileges or even their association with the CPM. Jones, Reynolds, Mothersbaugh and Beatty (2007) found that any loss of benefits from the relationship and plausible switching costs increases customer concerns about implications that may occur if their relationship with the organisation ends. Accordingly, those who fear losing their relationship show their relationship intentions (Kumar *et al.*, 2003).

Factor 5, **forgiveness** (eigenvalue = 1.934), also extracted 7 percent to the total variance explained and involved three items with factor loadings ranging from 0.788 to 0.830. Items which loaded onto this factor concentrated on the civil and building contractors' readiness to pardon their CPM for poor quality of products or bad service (La & Choi, 2012). Kim, Ok and Canter (2012) expound that customers who show tolerance of poor product or service delivery are more likely to pardon the transgression and, accordingly, display their inclination to relationship building intentions (Kumar *et al.*, 2003).

Factor 6, **involvement** (eigenvalue = 1.707), similarly extracted 7 percent to the total variance explained and loaded three items with factor loadings ranging from 0.816 to 0.866. This result is in line with findings by Nammir, Marane and Ali (2012:33), that customer involvement in a customer-organisational relationship is largely associated with the supplier organisation's relationship quality. Items which loaded onto this factor focus on the civil and building contractors' level of involvement with their CPM (Ashley, Noble, Donthu & Lemon, 2011). Camra-Fierro, Melero-Polo and Sese (2014) echo that the advantage of customers being

involved with suppliers' operations, is that they are not only providing approvals for improvement, but also endorse their relational partner through confident word-of-mouth to others.

Factor 7, **expectations** (eigenvalue = 1.505), extracted 6 percent as the lowest to the total variance explained and loaded three items with factor loadings ranging from 0.837 to 0.886. Items which loaded onto this factor refer to dealing with the civil and building contractors' expectations of getting value for money from the quality of secondary products offered concomitantly (Pelser & Mostert, 2016). Therefore, customers who expect more from their supplier organisation are keen to improve astute product and service delivery as they display high intent of building their relationship (Kumar *et al.*, 2003).

Factor 8, **feedback** (eigenvalue=1.004), likewise extracted 6 percent to the total variance explained and loaded three items with factor loadings ranging from 0.752 to 0.818. Items which loaded onto this factor determined the civil and building contractors' consistency of feedback towards their CPMs product and service delivery. Wirtz, Tambyah and Mattila (2010) reiterate that positive or negative comments assist organisations to identify strengths and weaknesses, to either be reinforced or avoided in the quest to satisfy customer requirements and improve product and service offerings. Kumar *et al.* (2003:670) note that customers who are more inclined to give positive or negative comments carry high relationship intentions.

7. LIMITATIONS AND FURTHER RESEARCH

This study focused on a one product classification (concrete); therefore, the results cannot be generalised to other product classifications. In addition, due to cost restraints, the study was constrained to a B2B setting within the Gauteng province of South Africa, which, accordingly, cannot be generalised to other provinces, suggesting that different outcomes for the antecedents of relationship intention could have emerged if more provinces were included. Future studies might consider extending their examinations across diverse categories of CIDB grades (characterised by different product categories) to provide an enriched understanding of the applicability of customers' relationship intentions in dissimilar B2B environments. Also, future research on some relationship intention factors (information sharing/exchange, flexibility and trust) as they seem to gain high importance on the wake of the fourth industrial technology. It is suggested that these factors should be examined on concrete product user's relationship intentions taking the domain of social media as a tool for relationship building and cultivating loyalists going forward.

8. CONCLUSION

This study's findings provide support for an eight-factor structure (expectations, involvement, trust, forgiveness, feedback, flexibility, information sharing and fear of relationship loss) with 36 items that explain the antecedents of relationship intentions. These findings suggest that the CPM should consider these variables in developing relationships with their civil and building contractors, including other concrete product users.

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REFERENCES

- Ashley, C., Nobel, S.M., Donthu, N. & Lemon, K.N. (2011). Why won't relate: Obstacles to relationship marketing engagement. *Journal of Business Research*, 64, 749-756.
- Awwad, A.S. & Almahamid, S.M. (2008). The link between modification flexibility and organisational objectives: an empirical study on Jordanian manufacturing companies. *Journal of Social Sciences*, 4(4), 299-307.
- Bateson, J.E.G. & Hoffman, K.D. 2011. *Services Marketing*. 4th ed. Australia: Cengage Learning.
- Bbenkele, E. & Madikiza, L. (2016). Envisioning public sector pathways: Gauteng as an entrepreneurial province in South Africa. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 2(2), 91-108.
- Benton, W.C. & Mchenry, L. (2010). *Construction purchasing and supply chain management*. New York: McGraw-Hill.
- Berndt, A. & Tait, M. (2012). *Relationship marketing and customer relationship management*. 2nd ed. Cape Town: Juta.
- Bojei, J. & Abu, M.L. (2014). The underlying dimensions of relationship marketing in the Malaysian mobile service sector. *Journal of Relationship Marketing*, 13(3), 169-190.
- Fornell, C & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.

- Han, H. & Hyun, S.S. (2015). Customer retention in the medical tourism industry: impact of quality, satisfaction, trust and price reasonableness. *Tourism Management*, 46, 20-29.
- Hoppner, J.J., Griffith, D.A. & White, R.C. (2015). Reciprocity in relationship marketing: a cross-cultural examination of the effects of equivalence and immediacy on relationship quality and satisfaction with performance. *Journal of International Marketing*, 23(4), 64-83.
- Hsu, C.C., Kannan, V.R., Tan, K.C. & Leong, G.K. (2008). Information sharing, buyer-supplier relationships and firm performance: a multi-region analysis. *International Journal of Physical Distribution and Logistics Management*, 38(4), 296-310.
- Jones, M.A., Reynolds, K.E., Mothersbaugh, D.L. & Beatty, S.E. (2007). The positive and negative effects of switching costs on relational outcomes. *Journal of Service Research*, 9(4), 335-355.
- Kim, W., Ok, C. & Canter, D.D. (2012). Moderating role of a priori customer-firm relationship in service recovery situations. *The Service Industries Journal*, 32(1), 59-82.
- Kline, R.B. (2011). Principles and practice of structural equation modelling. 3rd ed. New York: The Guilford Press.
- Kumar, V., Bohling, T.R. & Ladda, R.N. (2003). Antecedents and consequences of relationship intention: implications for transaction and relationship marketing. *Industrial Marketing Management*, 32, 667-676.
- La, S. & Choi, B. (2012). *The role of customer affection and trust in loyalty rebuilding after service failure and recovery*, *The Service Industries Journal*, 32(1), 105-125.
- Lin, S.Y. (2013). The influence of relational selling behavior on relationship quality: the moderating effect of perceived price and customers' relationship proneness. *Journal of Relationship Marketing*, 12(3), 204-222.
- Malhotra, N.K. (2010). *Marketing Research: An Applied Orientation*. 6th ed. Upper Saddle River: Pearson.
- Morgan, R.M. & Hunt, S.D. (1994). The commitment trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20-38.
- Nabi, N. (2012). Customer expectations of service quality: a study on private banks of Bangladesh. *World Review of Business Research*, 2(4), 172-186.

Pelser, C. & Mostert, P.G. (2016). Relationship intention and satisfaction as predictors of wholesale and retail customers' loyalty towards their training providers. *Southern African Business Review*, 20, 29-50.

Raciti, M.M., Ward, T. & Dagger, T.S. (2013). The effect of relationship desire on Consumer to business relationships. *European Journal of Marketing*, 47(4), 615-634.

Roberts-Lombard, M., Mpinganjira, M. & Svensson, G., (2017). Antecedents and outcomes of satisfaction in buyer supplier relationships in South Africa: a replication study. *South African Journal of Economic and Management Sciences*, 20(2017), 2-14.

Segarra-Moliner, J.R., Moliner-Tena, M.A. & Sánchez-Garcia, J. 2013. Relationship quality in business to business: a cross-cultural perspective from universities. *Marketing Intelligence and Planning*, 31(3), 196-215.

Tong, P.Y. & Crosno, J. 2015. Are information asymmetry and sharing good, bad or context dependent? A meta-analytic review. *Industrial Marketing Management*, 56(7), 167-180.

Wei, Y., Li, Z., Burton, J. & Haynes, J. (2013). Are Chinese consumers created equally relational? *Management Research Review*, 36(2013), 50-65.

Weinstein, A. (2002). Customer-specific strategies customer retention: a usage segmentation and customer value approach. *Journal of Targeting, Measurement and Analysis for Marketing*, 10(3), 259-268.

Wickramasinghe, V. & Weliwitigoda, P. (2011). Benefits gained from dimensions of social capital: a study of software developers in Sri Lanka. *Information Technology and People*, 24(4), 393-413.

Yu, K., Cadeaux, J. & Song, H. (2017). Flexibility and quality in logistics and relationships. *Industrial Marketing Management*, 62(4), 211-225.

Zeithaml, V.A., Bitner, M.J. & Gremler, D.D. 2009. *Services marketing: integrating customer focus across the firm*. 5th ed. New York: McGraw-Hill.

Malhotra, N., Uslay, C. & Ndubisi, O. 2008. Commentary on the essence of business marketing theory, research and tactics: contributions by the journal of business-to-business marketing by Lichtenthal, Mummalaneni and Wilson: a paradigm shift and prospection through expanded roles of buyers and sellers. *Journal of Business to Business Marketing*, 15(2), 204-217.

RELATIONSHIP BETWEEN SKILLS DEVELOPMENT, EMPLOYEE MOTIVATION AND ORGANISATIONAL PERFORMANCE IN SOUTH AFRICAN ORGANISATION

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–Abstract–

The enormous skills shortage in South Africa has a negative impact on the country's competitiveness. Since the advent of democracy in 1994, various regimes have tried to deal with these inheritance of the oppressive state of affairs; namely, the serious shortage of skills affecting the larger section of the country's population. The aftermath of apartheid has an adverse negative effect on a healthy economic performance of the country.

The predominant aim of this research is to establish the differences between a motivated workforce and job satisfaction as well as to establish the conditions of employment levels of the different workforce groupings. The second objective of the study is to assess the relationship between the three variables stated namely, motivation and job satisfaction, organisational climate and the effectiveness of training; and the third objective was to establish whether the results of training can predict employee motivation, job satisfaction and perception of organisational conditions. The findings demonstration that meaningful differences exist between the levels of 1) motivation/job satisfaction and organisational climate of employees of skilled/semi-skilled groups and 2) qualification levels. The study also shows that a well-trained workforce tends to be at a higher motivational level and have an improved perception about their organisational climate than those who received less or no training at all. In conclusion, the two predominant variables of this research (namely, motivation/job satisfaction and organisational climate) are both influenced by skilled/semi-skilled groups as well as the amount of training received. The findings also reveal major direct relationships between

the constructs of motivation/job satisfaction, organisational climate and effectiveness of training.

Key Words: Skills development, corporate (organisational) performance, country competitiveness

Jel Classification:

1. INTRODUCTION

Employee training and development has become one of the key aspects in improving employee performance in organisations, thus leading to improved organisational performance and growth (Mpofu & Hlatywayo, 2015). The competitiveness of any organisation is, to a great extent, dependent on how well capacitated its workforce is. Employees are more satisfied, productive and committed when they perceive a fit between their job and career development needs and work environment conditions and practices which in turn also addresses the organisation's need to retain high performing employees in the competitive business environment (Capuzzi & Stauffer, 2006; Kim 2017; (Potgieter, Coetzee, Engelbercht 2019). To ensure the success of most organisations, it becomes imperative; to procure a work force that complements the organisations required skills that will ensure a successful attainment of the company's strategic goals (Robbins & Decenzo, 2018). To increase its productivity, an organisation will have to search for people with a high motivational level, but who can be further developed for an improved performance to mitigate the companies' skills shortage. It is hence the motivational aspect that has to receive significant attention. For this purpose, Van Rensburg (2004) acknowledged that for any modern organisations striving to become world-class and compete globally it requires capable and committed employees (EI Toukhy 1998; Ensor 1997; Hough & Neuland, 2013). A committed organisational workforce leads to a desirable organisational outcome (Luthans, Baack & Taylor, 1987). This commitment can arguably be derived from job satisfaction or motivation level and perception of the organisational climate of the organisation. How can an organisation achieve a high level of employee motivation as well as a favourable perception of the organisational climate that will ultimately ensure a high level of productivity?

The Department of Labour (RSA, 2009) reported that a study conducted in 1998 on the training of 15 Organisation for Economic Cooperation and Development (OECD) Member States found that the majority of enterprises believed or

acknowledged that staff training results in an improved employee Productivity, increased flexible workforce, savings on material and capital costs, a more motivated workforce and an enhanced quality of goods and or service

This article appropriately fills the gap as no comparable study has been undertaken in South Africa. Judging from South Africa's ratings in the World Competitiveness Report, the country is slow at embracing a real commitment to vocational education and training. Mbigi and Maree (1995) assert that that organisations in South Africa will need to change the way things are done in the country if they wish to survive to the changing local environment and given the reality of international competition (Madi, 1993; Lesse, 1994); Koopman, 1994; Khoza, 1994).

To effectively deal with the country's skills challenges, the South African state organs promulgated the Skills Development Act and the Skills Development Levy Act. It becomes thereby imperative to understand that the demand for skills far outweighs the supply, and too often the response of firms has been to poach scarce skills from others not to invest in the training of these skills. Consequently, due to the high demand for scarce high skills in the labour market the price increased relative to others, but the skills pool has not increased significantly. So the country has a problem that can easily get worse (RSA, 2009). The introduction of the Skills Development Act (SDA), (Act No. 97 of 1998) and the Skills Development Levies Act demonstrate the government's reaction to this calamity. These Acts main purpose is to encourage the private and public participation in developing the required skills for a constantly changing economy, while mitigating the impact of skills shortage. Unfortunately, many South African employers see the new Skills Development levy only as a cost, and not seeing its benefits. These Skills Development Acts launched by the Department of Labour encourage and promote employees' performance through training. This move is enormously significant for the performance of employees within any given organisation. Its long-term implications can have far-reaching consequences for both the organisation and the country, and it can never be overemphasised.

2. PROBLEM STATEMENT

According to Ndedi (2015), organisations that ensure a high level of competitiveness should ensure that the entire workforce is happy and feel valued as part of the organisation. What arguably appears to be a common mistake by most organisations in terms of skills transfer, focus seems to be mainly on middle

and senior managers, with very little emphasis on lower-level managers who are at the lower level of remuneration (Robbins, 1998). The focus brought through on capacity building can motivate employees, improve their perception regarding the organisational climate is ultimately the focus of this research study.

The focus of this paper is that, the significance of staff training needs to be viewed as the true investment in human capital which has the potential to guarantee future rewards and sustainable competitive advantage for competitive organisations.

3. RESEARCH HYPOTHESES

The primary hypothesis postulates that appropriate training will improve the effort and capacity of an individual to perform. If effort is to lead to worthy performance, the employee must have the necessary capability to perform. This choice is based on the supposition that seeks to analyse the trainees' view that doing well in a program would lead to better job performance and subsequently to an appreciated outcome (Farr & Middlebrooks, 1990).

Hypothesis 1:

H1: Scores on worker motivation/job satisfaction differ significantly across pre- and post-test groups.

H1o: There is no significant difference between scores on individual motivation/job satisfaction in pre- and post-test groups.

Hypothesis 2:

H2: Demographic variables significantly affect pre and post test scores on the employee motivation/job satisfaction measuring instrument.

H2o: Demographic variables do not significantly affect pre and post test scores on the employee motivation/job satisfaction measuring instrument.

Hypothesis 3:

H3: Scores on perceptions of organisational climate measuring instrument differ significantly in pre- and post- treatment groups.

H3o: There are no significant differences in scores of organisational climate measuring instrument across pre- and post- groups.

Hypothesis 4:

H4: Demographic variables significantly affect pre- and post-test scores on the organisational climate measuring instrument.

H4o: Demographic variables do not significantly affect pre- and post-test scores on the organisational climate measuring instrument.

Each hypothesis correlates to the aspects that relate to the topic, and the basis of crafting and conducting these hypotheses is premised on the fact that amongst the most common factors determining individual performance, more often than not work motivation and the perception of organisational climate features prominently. Therefore, improving the knowledge, skills, and attitudes of employees was insufficient to improve their on-the-job performance (Fuller & Farrington, 1999). Performance is a much more complex issue, and requires that the two independent variables being explicitly factored into the equation. To test these hypotheses, Pearson's product-moment correlation coefficient, "r" will be used. Such correlations would reveal both the magnitude and direction (positive or negative) of relationships between the variables of interest (Emory & Cooper, 1991).

4. THE RESEARCH METHODOLOGY

Methodology refers to a carefully considered way of approaching a problem so that one can understand it better (Sayer, 1992).

4.1. The research design

A survey design is utilized to fulfill the aim of the research. The chosen design is therefore in the form of quasi-experimental research similar to pre-test post-test one group design (Cooper & Schindler, 2000:405; Shaughnessy & Zechmeister, 1997). The data collected will be adopted to define the current population and is appropriate for studying various groups at different stages of development. The same research design can be adopted to assess different population groups to address these variables. According to Shaughnessy and Zechmeister (1997), this design is ideally suited to descriptive and predictive functions associated with correlational research.

4.2. Population and sampling size

The sample size to be used in this study consists of employees that emanate from five (5) selected organisations in South Africa. The sample consisted of lower-level employees from the following organisations: A manufacturing company A; a financial institution B; a service company C; a food serving company D; and a construction company E. All of these companies are located in the Mpumalanga Province and Gauteng. The targeted sample size is ($n = 400+$), spread among the five organisations.

4.3. Measuring instruments and data collection

Four questionnaires are used in the empirical study, namely, the Job Description Index (JDI); Litwin and Stringer's Organisational Climate Questionnaire (LSOCQ); Self rated performance (SELPERF); Effectiveness of Training Questionnaire (EFFTRA). A self-completion questionnaire was administered to these lower-level workers, namely semi-skilled and skilled employees of the five participating companies.

4.4. Data presentation and analysis

Presentation of the collected data is done using both inferential and descriptive statistics, with the help of the computer software package, Statistical Package for the Social Sciences (SPSS, 2003) program. Cronbach alpha coefficients (α) and inter-item correlations coefficients are used to determine the internal consistency (reliability) of the measuring instruments and descriptive statistics are used to analyse data. Pearson correlations are used to assess the extent to which one variable is related to another.

5. FINDINGS

This section discusses the results of this empirical research.

Hypothesis 1 concerns associations between pre and post test scores on the employee motivation/ job satisfaction measuring instrument.

H1: Scores on "employee motivation/job satisfaction" differ significantly across pre- and post-test groups.

H1o: There is no significant difference between scores on "employee motivation/job satisfaction" in pre- and post-test groups.

Analysis of hypothesis 1 it relates to the ‘Employee Motivation/job satisfaction’ construct only. Initially, differences in Employee Motivation/job satisfaction across pre- and post-groups overall, is studied (namely Hypothesis 1). The results of the investigation follow below:

Descriptive Statistics (Means and Standard Deviations) for the metric “Employee Motivation/job satisfaction” by Pre- and Post-Groups

Independent T-Test for the metric “Employee Motivation/job satisfaction” for Pre- and Post-Groups

As can be seen from the findings, the p value of 0.477 is not less than 0.05; therefore, with reference to Hypothesis 1, there is not sufficient evidence at a 5% level of significance to suggest that the population mean ‘employee motivation/job satisfaction scores’ are significantly different across both the pre- and post-groups.

Hypothesis 2 incorporates ten sub-hypotheses concerning associations between demographic variables and pre and post test scores on the “employee motivation/job satisfaction” measuring instruments.

H2: Demographic variables significantly affect pre and post test scores on the “employee motivation/job satisfaction” measuring instrument.

H2o: Demographic variables do not significantly affect pre and post test scores on the “employee motivation/job satisfaction” measuring instrument.

Secondly, Hypothesis 2 with its ten sub-hypotheses is investigated by looking at each demographic individually and its effect on motivation and job satisfaction across pre and post groups. The study now investigates differences in the employee motivation/job satisfaction scores across both the pre- and post-groups by each demographic variable, initially starting with the company. As the research show, the p values of company A, B, C and D are all less than 0.05. The former two companies reveal a significant increase in the construct, whereas the latter company reveals a significant decreases if one study.

There are differences in the motivation/job satisfaction scores across both the pre- and post-groups by the job categories of skilled and semi-skilled. From the above findings, no tests are significant as both p values are not less than the 5% significance level. However, it is interesting to see how skilled workers have

increased their levels, whereas the semi-skilled have decreased; although, in both cases not significantly.

There are differences in the motivation/job satisfaction scores across both the pre- and post-groups by gender. As can be seen from the research the p value of 0.001 for females is less than 0.05; therefore, there is sufficient evidence at a 5% level of significance to suggest that the population means for motivation/job satisfaction scores for the post group are significantly larger than the population means for the pre-group. The findings, however, in the male category reveal no significant changes.

There are differences in the motivation/job satisfaction scores across both the pre- and post-groups by race are noticed. It is evident from the findings on motivation/job satisfaction dimension that no tests are significant as all three p-values are not less than the 5% significance.

The study checks parametric findings by also running the corresponding nonparametric test, namely the Mann Whitney U-Test. The findings from the corresponding non parametric tests back up the findings of the parametric test counterparts. The findings on motivation/job satisfaction dimension show that no tests are significant as all three p values are not less than the 5% significance. It should however be mentioned that African and Coloured race categories are very close to being significant with p values for both equalling 0.055. In both categories, the sample means for “employee motivation/job satisfaction” show increases from the pre to post groups.

There are differences in the motivation/job satisfaction scores across both the pre- and post-groups by home language (Kolmogorov Smirnov Test). Due to small sample sizes in many categories the Kolmogorov Smirnov test statistic of normality is run for all metrics, initially to decide if either parametric or non-parametric tests are appropriate.

By inspecting the results, the p value from ‘Pre-South Sotho’ is 0.027 which is less than 0.05; therefore, this metric in particular reveals significant evidence (5% significance level) of non-normality. However, all other metrics do not reflect significant evidence of non-normality, but in terms of being thorough, both parametric and non-parametric tests are run in all cases. The parametric tests are run initially. It is evident that no tests are significant as all p values are not less than the 5% significance level. These results are substantiated, with one exception

being that South Sotho reveals a significant increase in motivation and job satisfaction.

There are differences in the motivation/job satisfaction scores across both the pre- and post-groups by marital status. Research results clearly show that no tests are significant as all p values are not less than the 5% significance level. The findings indicate that the p value of 0.002 for post Matric is less than 0.05. Therefore, there is sufficient evidence at a 5% level of significance to suggest that the population mean motivation/job satisfaction scores for the post group is significantly larger than the population mean for the pre- group for post Matric. The findings however, in the 'below grade 12' category reveal no significant changes.

There are differences in the motivation/job satisfaction scores across both the pre- and post-groups' work experience in the same job. The findings show that the p value of 0.028 for 6 – 10 years is less than 0.05; therefore, there is sufficient evidence at a 5% level of significance to suggest that the population mean motivation/job satisfaction scores for the post group are significantly larger than the population mean for the pre-group for the 6 – 10 year category. The findings however, in all other categories reveal no significant changes.

There are differences in the motivation/job satisfaction scores across both the pre- and post-groups by work experience in the same company. The result indicates that no tests are significant, as all p values are not less than the 5% significance level, although a few categories are on the borderline of being significant.

Hypothesis 3 concerns associations between pre- and post-test scores on the organisational climate measuring instrument.

H3: Scores on perceptions of organisational climate measuring instrument differ significantly in pre- and post- treatment groups.

H3o: There are no significant differences in scores of organisational climate measuring instrument across pre- and post- groups.

This section is investigating the categories of skilled and semi-skilled workers for differences in organisational climate. The research show that the p value of 0.323 is not less than 0.05, therefore regarding Hypothesis 3, there is not sufficient evidence at a 5% level of significance to suggest that the population mean organisational climate scores are significantly different across both the pre- and post-groups.

Hypothesis 4 incorporates ten sub-hypotheses concerning associations between demographic variables and group pre- and post-scores on the organisational climate measuring instrument.

H4: Demographic variables significantly affect pre- and post-test scores on the organisational climate measuring instrument.

H4o: Demographic variables do not significantly affect pre- and post-test scores on the organisational climate measuring instrument.

Hypothesis 4 is investigated by looking at each demographic individually and its effect on organisational climate across pre- and post-groups.

There are differences in the organisational climate scores across both the pre- and post-groups by each demographic, initially starting with company. The findings show that the p value of B is less than 0.05. Therefore, B reveals a significant increase from that and that significance for a two-tailed test implies significance for a one-tailed test. No other categories of company reveal any significant changes.

There are differences in the organisational climate scores across both the pre- and post-groups by the job categories of skilled and semi-skilled. Both categories are significant with p values in both cases less than 0.05. When studying, skilled workers have increased their organisational climate scores significantly, while semi-skilled workers have decreased their organisational climate scores significantly.

There are differences in the organisational climate scores across both the pre- and post-groups by gender. The results of the test show that for both categories namely, males and females show that there are no significant differences in mean scores, as the p values in both cases are not less than 0.05.

There are differences in the organisational climate scores across both the pre- and post-groups by race. The finding indicates that the white race reflects a significant increase in organisational climate scores with a p value of 0.001, which is less than 0.05 (an indication of a significance level). The coloured race is on the borderline of a significant increase, and no other categories reveal significant changes.

6. DISCUSSION SUMMARY

The results of this study indicate that the p value of 0.477 is not less than 0.05. Therefore, regarding Hypothesis one, there is not sufficient evidence at a 5% level of significance to suggest that the population mean ‘motivation/job satisfaction scores’ are significantly different across both the pre- and post-groups. This finding does not support Hypothesis one, which states as follows:

“There is a significant difference in the dependent variable, namely employee motivation/job satisfaction across pre- and post-groups”.

Similarly, the results of this study indicate that the p value of 0.323 is not less than 0.05. Therefore, regarding Hypothesis three, there is not sufficient evidence at a 5% level of significance to suggest that the population mean ‘organisational climate scores’ are significantly different across both the pre- and post-groups. This finding does not support Hypothesis three, which is as follows: “There is a significant difference in the dependent variable, namely perceptions of organizational climate across pre- and post-groups”. The findings of the study concerning Hypotheses 2 and 4 indicate that certain demographic variables impact differently on motivation/job satisfaction. The discussion of the results is listed below:

6.1. Summary of the main findings

The main results of the research for hypotheses 1 to 4 can be summarised as follows: When analysing the result of the study, concerning both employee motivation/job satisfaction, and organisational climate, it is evident that the most common feature of their findings relates to the response of the skilled workers, which is positive in both situations. Thus, the study revealed a clear relationship between the two variables and training, especially as it pertains to skilled employees. Toulson and Smith (1994) similarly support evidence to suggest that the organisational climate can influence both job performance and employee satisfaction (Lawler, Hall & Oldham, 1974; Papa, 2010) mention that the organisational climate is a product of several environmental and internal organisational factors that are subject to some degree of regulation or influence by management. One of the study’s most significant finding for both variables, is that, those employees who received more training are more motivated and have an increased perception about their organisational climate than those who received less or no training at all.

7. RECOMMENDATION FOR FUTURE RESEARCH

In conclusion, the categories of demographic variables that led to a significant increase in the dependent variable “employee motivation and job satisfaction” consist of skilled workers, females, respondents from the South Sotho language group, those who had post-Matric qualifications and respondents with 6 – 10 years’ experience in the same job.

In sum, it can safely be inferred that the categories of demographic variables that led to a significant increase in the dependent variable ‘organisational climate’ consisted of skilled workers, company’s B employees, white respondents, Afrikaans-speaking and post-Matric respondents and those with 6 – 10 years’ experience in the same job. Only semi-skilled respondents led to a significant decrease in organisational climate. From the study conducted by Wood and Sella (2000), putting semi-skilled employees especially through training might not be an easy job. Their findings revealed that a significant number of existing employees with only limited formal education and many years of service might feel threatened by the (training) process. It should be recognised that the former apartheid system resulted in grossly unequal access to education and training, perpetuating serious labour-market distortions (Horwitz & Franklin, 1996:12).

REFERENCES

- Papa, S.D. (2010). Corporate identity for te young fuller figure woman. ETD. Cape Peninsula.
- Cooper, D.R. & Schindler, P.S. (2000). *Business Research Methods*. 7th Edition. Boston: McGraw-Hill Irwin.
- Emory, C.W. & Cooper, D.R. (1991). *Business research methods*. 4th Edition. Homewood, IL: Irwin.
- Ensor, K. (1997). Reforming health care in the Republic of Kazakstan. Willey on line library. International Journal of Health Planning and Management/Volume12, issue 3.
- Farr, J.I. & Middlebrooks, C. (1990). Enhancing motivation to participate in professional development. In Willis, S.L. & Dubin, S.S. (Eds.). *Maintaining professional competence*: 195-213. San Francisco: Jossey-Bass.

- Fuller, J. & Farrington, J. (1999). *From Training to Performance Improvement. Navigating the Transition*. San Francisco: Jossey-Bass.
- Gutek, B., Larwood, L. & Stromberg, A. (1986). "Women at Work." Pp. 217-234 in *International Review of Industrial and Organisational Psychology*, edited by C. L. Cooper & I. Robertson. New York: Wiley.
- Horwitz, F.M. & Franklin, E. (1996). Labour market flexibility in South Africa: researching recent developments. *South African Journal of Labour Relations*, 20(1), 3-40.
- Hough, J. & Neuland, E. (2013). Strategic Management and the use of information and communication technologies by selected South African and American students. Khoza, R. (1994). The need for an Afrocentric management approach. In P. Christie, R. Lessem, L. Mbigi (Eds). *African Management*. Randburg: Knowledge Resources.
- Koopman, A. (1994). Transcultural management - in search of pragmatic humanism. In P. Christie, R. Lessem, L. Mbigi (Eds). *African Management*. Randburg: Knowledge Resources.
- Lawler, E. E., Hall, D. T. & Oldham, G. R. (1974). Organisational climate: Relationship to organisational structure, process and performance. *Organisational Behavior & Human Performance*, 11(1), 139-155.
- Luthans, F., Baack, D. & Taylor, L. (1987). Organisational commitment: Analysis of antecedents. *Human Relations*, 40(4), 219-236.
- Madi, P. 1993. *Affirmative action in corporate South Africa*. Kenwyn: Juta.
- Mbigi, L. & Maree, J. (1995). Ubuntu: The Spirit of African Transformation Management, *Knowledge Resources* (PTY) Ltd.
- Mpofu M. & Hlatywayo C.K. (2015). Training and development as a tool for improving basic service delivery; *Journal of Economics Finance and Administrative Science*, 20, 133–136.
- Ndedi, A. (2015). *Work Life Balance and Happiness in the Workplace*. LAP Lambert Academic Publishing. (February 5, 2015)
- Newton, T.G. & Keenan, A. (1983). Is work involvement an attribute of the person or the environment? *Journal of Occupational Behavior*, 4, 169-178.

Coetzee M, Engelbercht, L. (2019). How employability attributes media the link between knowledge workers' career adaptation concerns and their self-perceived employability. SAGE Journals. Psychological reports.

RSA The department of labour, (2009). Challenges, analysis of working environment, strengths & way forward inclusive of work in progress on improvement of labour centre.

Robbins, S.P. (1998). *Organisational Behaviour Concepts, Controversies, Applications*. International Edition. 8th Edition. Prentice-Hall International: New Jersey.

Robbins, S. & Decenzo. A. (2018). *Fundamentals of Management essentials concepts and applications*. Prentice Hall, Inc.

Sayer, A. (1992). *Methods in Social Science. A realist approach*. London: Routledge.

Shaughnessy, J. J, and Zechmeister, E. B. (1997) *Research Methods in Psychology*. 4th ed. 30 (2):125-128. New York: McGraw-Hill

Toulson, P. & Smith, M. (1994). The relationship between organisational climate and employee perception of personnel management practices. *Public Personnel Management*, 23 (3): 453-468.

Van Rensburg, P (2004). Style characteristics and the cross-section of JSC returns-Sabinet.

Wood, G. & Sella, R. (2000). Making human resource development work: a case study on internal training within the Eastern Cape textile industry, South Africa. *Human Resource Development International*, 3(4), 451-464.

TALENT RETENTION OF ACADEMIC STAFF IN SOUTH AFRICAN HIGHER EDUCATION INSTITUTIONS

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—Abstract —

Voluntary turnover intentions of academic staff in South African higher education institutions (HEIs) are escalating. High turnover of academics present several challenges to higher education such as additional costs for the induction and training of new staff, loss of research outputs and organisational productivity, and reduced quality of teaching due to mid-semester replacements of lecturers. Therefore higher education institutions need to become more talent intelligent and retain quality academics to remain relevant and sustainable. The main objective of this research was to determine the factors affecting the talent retention of early career academics in selected South African Higher Education Institutions.

A mixed-method research approach was used for this study. A Talent Retention Diagnostic Tool was administered among early career academics from selected HEIs (n=117). Follow-up interviews (n=23) were done with early career academics from different HEIs within South Africa.

The findings showed that the respondents were slightly satisfied with their compensation. Some respondents alluded to a significant lack of recognition despite high performance. On average it appeared that the participants were satisfied with management support. Some participants however pointed out that more attention should be paid to talent management and performance evaluation. The results further showed that the participants were moderately satisfied with general institutional practices. Compensation and recognition and institutional practices had the largest effect on employees' intention to quit their jobs.

This study identified the factors that potentially affect early career academic's intentions to quit their profession. HEIs are advised to redevelop talent management practices with regard to compensation and recognition, career development, and general institutional practices to cater for the diverse needs of a new generation of academic staff. HEIs are encouraged to build a supportive work environment for early career academics that will retain them in higher education institutions.

Key Words: Compensation, Early career academics, Management support, Talent management, Turnover intentions

JEL Classification: J24

1. INTRODUCTION

Voluntary turnover intentions of academic staff in Southern African higher education institutions (HEIs) are escalating (Makondo, 2014; Ntisa, 2015). A variety of factors can be attributed to this phenomenon such as poor compensation and incentives (Mabaso & Dlamini, 2017), a lack of infrastructure and continuous unsafe work environment because of student unrest (Mokgojwa, Barkhuizen & Schutte, 2017), low performance organisational culture (Barkhuizen & Schutte, 2017), unrealistic transformation initiatives (Du Preez, Simmonds & Verhoef, 2016) and the absence of a compelling talent value proposition to adequately manage the career life cycle of early career scholars (Saurombe, 2017). According to Jain (2013), high turnover intentions present several challenges to higher education, such as additional costs for the induction and training of new staff, loss of research outputs and organisational productivity, and reduced quality

of teaching due to mid-semester replacements of lecturers. Consequently South African higher education institutions need to become more business intelligent and retain quality academics to remain relevant and sustainable (Calitz, Bosire & Cullen, 2017).

The main objective of this research was to explore the factors affecting the talent retention of early career academics in selected South African Higher Education Institutions. Currently there are three challenges relating to the retention of early career academics in HEIs. First, higher education needs to compete with industry to retain young, skilled, and talented academics, as these individuals are leaving for more attractive compensation in the private sector (Erasmus, Grobler & van Niekerk, 2015). A report by Higher Education South Africa (2014) showed that early career academics earn comparably less than their counterparts in the industry. Second, HEIs need to ensure that early career academics are equipped with the relevant teaching skills to enhance the employability of students. However, a lack of career development infrastructure and government funding significantly hinder academic staff development initiatives (Busch & Ledingham, 2016). Finally, novice academics are expected to contribute to institutional cultures, especially at historically white universities. Research evidence shows that unfair discrimination practices and inequity still prevail at most HEIs, resulting in novice scholars leaving academia (Hemson & Singh, 2010).

This research adopts the talent retention framework of Theron (2015). According to this framework factors such as compensation and recognition, management support, and satisfaction with organisational practices are key contributors for the talent retention of early career academics. Next, a brief literature review is presented on the possible retention factors for early career academics. This is followed by a discussion of the research method adopted for this study, where after the results of the study are reported. This article concludes with recommendations for practice.

2. THEORETICAL FRAMEWORK

2.1. Compensation and recognition

The compensation and recognition of academic staff remain a burning issue in higher education. A study by Ng'ethe, Iravo and Namusonge (2012) confirmed that employees will stay with an organisation when they feel that their capabilities, efforts and performance are recognised and appreciated. The greatest bulk of research continues to confirm the poor pay and inadequate recognition of academic staff see (Makondo, 2014; Onah & Anikwe, 2016). Chabaya, Tshephe,

and Molotsi (2014) found that, in most cases, academic staff feel that they are worth more than the pay they receive from their employers. Compensation has also been highlighted as one of the key reasons why academics leave or consider leaving their occupation (Selesho & Naile, 2014). A properly structured compensation package, together with an effective reward strategy, needs to be linked to the talent management system, in order to facilitate talent retention processes (Smit, Stanz & Bussin, 2015).

2.2. Management Support

The importance of management support for talent management is well documented. Management support in the academic context should include effective performance management and recognition, participative and informed decision-making, opportunities to apply skills, and joint problem-solving (Matata, Elegwa, & Maurice, 2014; Mohamed & El-Shaer, 2013). A great deal of research has also shown that a lack of management support and poor leadership styles are key contributors to the turnover intentions of academic staff (Hundera, 2014; Jain, 2013). Mokgojwa et al. (2017) found that there is a considerable disconnect between what management perceive as human capital risks in higher education compared to those of academic staff. Moreover Calitz and colleagues (2017) found low maturity levels from management in the use of business intelligence technologies. This have adverse implications for effective strategic planning.

2.3. Institutional practices

Theron (2015) classified institutional practices in terms of general practices (i.e. mentorship, support from the HR department, and access to information), institutional funding opportunities, diversity management, and community service. Mentorship is important for the employability and retention of newly hired academics (Lo & Ramayah, 2011). A study by Pithouse-Morgan, Masinga, Naicker, Hlao, and Pillay (2016) highlighted collegial relationships as critical to new academics' self-belief. McKay and Monk (2017) advocate that self-sustaining peer support and information mentoring from more senior staff should be part of professional learning.

Research productivity (as defined by the number of outputs), is a key indicator of academic success for early career academics (Sutherland, Wilson & Williams, 2013). Soogwan, Jang, Kang and Han (2018) alludes to the importance of research funding as a critical enhancer of academic staff research performance. Busch and Ledingham (2016) found that early career academics experience

stressors relating to structural barriers in the application of and access to research, publishing issues, and advice in relation to accessibility of research outputs.

Researchers have also highlighted infrastructural challenges relating to Southern African HEIs. According to the National Development Plan, South African HEIs are expected to increase student enrolment from 1 million to 1.6 million by 2030 (Bozzoli, De Kadt, De la Rey, Habib, Laband *et al.*, 2015). Consequently, HEIs will be faced with heavy infrastructural demands in the midst of budget cuts (Mushemeza, 2016). Ondari-Okemwa (2011) found that a lack of infrastructure and declining budget allocations limit HEIs' ability to produce knowledge. McGregor (2009) furthermore highlighted the importance of proactive investment in infrastructure for the retention of academic staff.

3. RESEARCH METHODS

3.1. Research approach

A mixed-method research approach was used in the present study. Mixed-method research is defined as a process whereby a researcher combines the elements of quantitative and qualitative research for the purpose of gaining more breadth and depth in understanding and corroboration in research (Onwugbuzie, Bustamante, & Nelson, 2010). Mixed-method research is increasing in popularity. According to Molina-Azorin (2012), mixed-method research has been receiving more citations than research using one data-gathering method only.

3.2. Sampling and research procedures

This study included early career academic staff members from 11 public HEIs in South Africa. The researcher distributed 294 surveys of which 117 were returned and usable for analyses. This represented a 40% response rate. The majority of the participants consisted of women (51.3%) and representative of the white ethnic group (47.9%). The participants were primarily aged between 40-49 years (34%) and in possession of a Master's degree as their highest level of educational qualification (49.65). Most of the participants were employed as lecturers (54.7%), had between 0-5 years of work experience in higher education institutions (53%) and were employed for the same period of time in their current job (70.9%). Follow-up interviews were done with 23 early career academics from selected HEIs. Most of the participants for the qualitative interviews in were male (N=15), employed as lecturer (N=16), in possession of a Master's degree (N=13) and representative of the black African ethnic group (N=14).

3.3. Measuring Instruments

An adapted version of the **Talent Retention Scale** of Theron (2015) was used. The scale consists of the following sections: Compensation and Recognition Scale (nine items), Management Support (nine items), Satisfaction with Institutional Practices Scale (16 items) and Intention to Quit Scale (3 items). Responses for Satisfaction with Institutional Practices were measured on a four-point Likert scale ranging from *Extremely dissatisfied* (1) to *Extremely satisfied* (4). Responses for the rest of the questionnaire were measured on a six-point Likert scale from strongly disagree (1) to Strongly Disagree (6).

3.4. Data analyses

The data in this study was analysed using SPSS (SPSS, 2019). The researchers applied exploratory factor analyses to uncover the factor structure of each of the measurements used. Descriptive statistics such as frequencies, means, standard deviation, skewness and kurtosis were used to analyse the magnitude of the factors of the measurements in this study. The reliability of the factors were determined by using Cronbach Alpha coefficients of $\alpha \geq 0.70$ (see Field, 2018). The quantitative results in this study were further analysed by using follow-up interviews with a selected group of early career academics. The findings of the qualitative interviews were used to supplement and explain the quantitative results in more detail.

4. RESULTS AND FINDINGS

4.1. Factor and Reliability Analyses

The results of the factor analyses, descriptive statistics and reliabilities are reported in Table 1 below.

Table 1: Factors, Descriptive Statistics and Reliabilities of Questionnaires

Factors	MSA	Variance Explained	Mean	SD	Skewness	Kurtosis	α
Compensation and Recognition	0.828	53.514%	3.406	1.110	-0.176	-0.667	0.890
Management Support	0.898	69.333%	4.261	1.205	-0.841	-0.071	0.942
Satisfaction with General Institutional Practices	0.735	61.592%	2.752	0.620	-0.352	0.258	0.910
Satisfaction with Research Funding			2.749	0.711	-0.574	0.698	0.812
Intention to quit	0.735	85.478%	2.946	1.599	0.518	-0.829	0.913

The results in Table 1 show acceptable Measure of sample adequacy (MSA) above 0.60 for factor analyses (Hair, Black, Babin and Anderson, 2010). The results of the factor analyses resulted in factor for Compensation and Recognition (variance explained = 53.514%), Management support (variance explained = 69.333%), two factors for Satisfaction with Institutional Practices (variance explained = 61.592%) and one factor for Intention to Quit (variance explained = 85.478%). The results in Table 1 further show good to excellent reliabilities for the measurements, which comply with the guideline of $\alpha \geq 0.70$ (Field, 2018). The results of the measurements are further explored in the section that follows, and are supplemented by quotes from the participant interviews.

4.2. Compensation and Recognition

From the mean scores, it is evident that the respondents were in slight agreement that the compensation and recognition practices of HEIs were adequate. Similar findings were observed from follow-up interviews with early career academics. One participant noted:

“Remuneration, I think, is one challenge of the university. They are trying to make it more market-related, because industry will eventually take the candidates in terms of remuneration. I don’t think industry can attract you any other way. I think the fact that some people will consider going back into industry will be due to monetary reason” (Participant 8, female, lecturer, Master’s degree).

Another participant added:

“I think the salaries are not compatible at all, but we all know that money alone doesn’t bring happiness. If you compare this university’s salaries with other universities, I think we are a little behind” (Participant 10, female, senior lecturer, doctorate).

and

“We struggle to attract talented people to the academic world, because people consider the pay to be not great, so you will find that your top people will always go to places where the remuneration is top class. We have to be very specific to the people that we attract to the academia” (Participant 11, male, lecturer, Master’s degree).

Participant 2 reflected on challenges relating to benefits offered by the institution:

“For issues like medical aid, where you have to pay around five to six thousand rand, and which means you go home with about nothing. Now it becomes a

problem, meaning lecturers don't even have medical aid because of that, and that is one thing I'm not very happy about" (Participant 2, male, lecturer, Master's degree).

4.3. Management Support

Mixed results were observed relating to management support for early career academics. From the quantitative analyses, it was evident that the respondents were mostly in agreement that they received adequate management support. Some participants were of the opinion that more attention should be paid to talent- and performance management, as mentioned by one:

"Talent management, as we really need to try and customise performance management and try to individualise it. In the academic field, it is very stupid to have a standard set of templates of managing someone's performance. To individualise the rewards and recognition that is linked to your performance" (Participant 8, female, lecturer, Master's degree).

Another respondent noted dissatisfaction with management support by stating:

"The managerial module of the university has changed into a corrupt one. The academic has been reduced in stages because of way of managing us" (Participant 9, female, lecturer, Master's degree).

4.4. Satisfaction with General Institutional Practices

Respondents in this sample were slightly satisfied with general institutional practices. Most of the interview participants were in agreement that administrative support functions needed improvement, as mentioned by one of the respondents:

"The IT support function, on the other hand, is very poor. There are some departments that are very supportive, then there are others departments that need to lift their game in order to deliver better support" (Participant 11, male, lecturer, Master's degree, white).

Participant 7 supported this view by adding:

"Administrative support ... I think lecturers should have the time available to prepare for classes and do research, but then they should really give more support in terms of assistance. Administrative support would be valuable in a university environment" (Participant 8, female, lecturer, Master's degree).

Respondents were also slightly satisfied with the availability of research funding. However, they felt that it limited their career mobility between institutions, because of contractual obligations:

“If it comes, probably you would go, but for now, because we are also stuck in here because of a certain contract we signed that we have to be here for a certain number of years, otherwise we cannot just quit, because we have already taken up some grants from the university, which we need to stay for about four or five years before you think of leaving, so it’s a problem” (Participant 2, male, lecturer, Master’s degree).

4.5. Intention to Quit

Respondents in this sample were less likely to consider quitting the academic profession. One of the respondents highlighted the difficulty of re-starting a career:

“Well, at my age, I’m not ready to begin going on starting a new, depending what’s on offer. I may consider, so whatever comes on offer should be enticing, to let me leave my current position” (Participant 1, male, senior lecturer, doctorate).

Other participants indicated their passion and commitment towards the academic profession; one participant stated:

“This is the ideal world for me, and I would like to be in a space where I can be involved in academia for the rest of my life, but, for now, I haven’t considered leaving” (Participant 11, male, lecturer, Master’s degree).

5. DISCUSSION

The main objective of this research was to explore the determinants of talent retention of early career academics in selected South African Higher Education Institutions. Participants were of the opinion that the compensation practices of HEIs are not market-related. In line with the report of HESA (2014), this finding highlights a potential retention risk regarding early career academics, as they are likely to leave the academic profession for higher salary packages in the private sector. Other participants also highlighted challenges relating to the benefits offered by a particular HEI. Medical aid benefits were noted not to be comparable with those of the private sector and even those of other South African HEIs. This finding points to the potential risk of not only losing early career talent to the private sector, but also to other South African HEIs. Participants were also dissatisfied with the recognition they received, and felt that this was reserved for

more senior academics. One of the participants indicated the intention to leave the institution because of a lack of recognition. The results of the study therefore confirm that poor rewards and recognition contribute to the turnover intentions of early career academics (Makondo, 2014; Onah & Anikwe, 2016; Selesha, 2014).

The results of the study show that the participants were mostly satisfied with the support that they received from management. This is an important finding, as managers are key to the retention of early career employees (Du Plessis et al., 2015). Some participants, however, expressed a deep dissatisfaction with management, citing corrupt management practices and a lack of attention to talent management practices and performance management. Some participants further indicated that poor management had a negative impact on their morale. This study's findings confirm that management needs to pay more attention to talent management practices and reward early career academics properly.

The respondents in this study were only slightly satisfied with institutional practices. As with previous studies, infrastructural challenges in departments such as information technology prevail. Other participants highlighted the lack of administrative support, which, in turn, increased their workload. Participants also highlighted challenges relating to research funding. Those who had access to research funding felt that they were limited in their career mobility and career advancement, because of contractual obligations. Others were of the opinion that there is no support from the University regarding research funds, and that they have to raise these funds themselves, which left them discouraged. The results therefore confirm that research funding support in HEIs is problematic (Busch & Ledingham; 2016).

The results of this study showed that the academics were in slight agreement that they would like to remain in their job. One participant mentioned that age prevented her from starting a new career. Another participant indicated a sense of loyalty towards his institution and a passion for his profession. In contrast with previous studies mentorship and employment equity practices did not play a role in the retention of the early career academics in the present study (Lo & Ramayah, 2011).

This research had some limitations. First it used a cross-sectional research approach which means that talent retention were measured at one point in time. Given the current changing situation of higher education institutions, these perceptions are likely to change over the long-term. Therefore longitudinal research should be applied to detect turnover intentions of early career academics

over the long-term. Second, this research only focused on early career academics. As a result the findings cannot be generalised to other academic job levels. For future research it is recommended that the sample size be expanded to other academic job levels to do a comparative analyses on turnover intentions. The research should also be expanded to include higher education management and human resource management departments to obtain a more holistic perspective on talent retention in higher education institutions. Future research should also focus on the individual and organisational outcomes of talent retention for early career academics.

6. CONCLUSIONS

In sum, the results of this research confirmed that compensation, management support, and institutional practices, such as research support and infrastructure, are critical for the retention of early career academics. Higher education managers are encouraged to develop talent management policies and strategies to cater for the diverse needs of a new generation workforce. Further the demographic information showed alarming trends in terms of early career academics who have been in the employment of higher education institutions for a long period of time but operating on junior levels. Higher education management should focus on detecting the factors that facilitate and constrain the career advancement of early career academics. This research also highlighted additional factors, such as demographic trends and loyalty that should be considered in the retention of early career academics.

REFERENCES

- Bitzer, E. M., & Albertyn, R. M. 2011. Late entrants into the academic profession: Conceptual constructions of hope in a faculty of education. *South African Journal of Higher Education*, 25: 897-913.
- Bozzoli, B, De Kadt, E, De le Rey, C, Habib,A., Laband, J. et al., 2015. *The idea of a University*. Focus, Issue 76, Helen Suzman Foundation, South Africa.
- Busch, R., & Ledingham, M. 2016. *Bothered bloggings and troubled tweets: Constructions of stress and concerns for early-career academics*. First International Conference on Advanced Business and Social Sciences, 1-12.
- Calitz, A., Bosire, S., & Cullen, M. 2017. The role of business intelligence in sustainability reporting for South African higher education institutions.

International Journal of Sustainability in Higher Education,
<https://doi.org/10.1108/IJSHE-10-2016-0186>

- Chabaya, O., Pinagase, T.G., Molotsi, M.M. 2014. Causes and Effects of Staff Turnover in the Academic Development Centre: A Case of a Historically Black University in South Africa. *Mediterranean Journal of Social Sciences*, 5: 69-76.
- Du Plessis, L., Barkhuizen, E. N., Stanz, K. J., & Schutte, N. E. 2015. The management side of talent: Causal implications for the retention of Generation Y employees. *The Journal of Applied Business Research*, 31: 1767-1780.
- Du Preez, P., Simmonds, S. & Verhoef, A.H., 2016, 'Rethinking and researching transformation in higher education: A meta-study of South African trends', *Transformation in Higher Education* 1(1), a2. <http://dx.doi.org/10.4102/the.v1i1.2>
- Field, A. (2018). *Discovering statistics using SPSS*. 3rd ed.. London: Sage Publications.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. 2010. *Multivariate data analysis: A global perspective*. 7th ed. New Jersey: Pearson Education.
- Higher Education South Africa (2014). *Remuneration of academic staff at South African universities: A summary report of the HESA statistical study of academic remuneration*. Pretoria, South Africa.
- Hemson, C., & Singh, P. 2010. Shadows of transformation: Inclusion and exclusion of academic staff at a university of technology. *South African Journal of Higher Education*, 24: 935-952.
- Hundera, M. B. 2014. Factors affecting academic staff turnover intentions and the moderating effect of gender. *International Journal of Research in Business Management*, 2: 57-70.
- Jain, S. 2013. The causes of turnover intention in the employees of educational institutes: An observation. *Tactful Management Research Journal*, 1: 1-4.
- Lo, M., & Ramayah, T. 2011. Mentoring and job satisfaction in Malaysian SMEs. *Journal of Management Development*, 30: 427 – 440.
- Mabaso, C.M., & Dlamini, B.I. 2017. Impact of Compensation and Benefits on Job Satisfaction. *Research Journal on Business Management*, 11: 80-90.

- Makondo, L. 2014. Academics attraction and retention trends at a South African university. *Journal of Sociology Social Anthropology*, 5: 169-177.
- Matata, K., Elegwa, K., & Maurice, S. 2014. Job-related factors and their influence on organisational commitment of part-time academic staff in institutions of higher education in Nairobi and Mombasa cities in Kenya. *International Journal of Business and Social Science*, 5: 110-119.
- McKay, L., & Monk, S. 2017. Early career academics learning the game in Whackademia. *Higher Education Research and Development*, 36: 1251-1263.
- Mohamed, L. K., & El-Shaer, A. M. 2013. Professional commitment and perceived organisational support among nursing academic staff: A comparative study. *Medical Journal of Cairo University*, 81: 235-243.
- Mokgojwa, D., Barkhuizen, E.N., & Schutte, N.E. 2017. The Development of a Talent Risk Management Tool for Academics in South African Education Institutions. In N. Delener, L. & Schweikert, C. (Eds.), *19th Global Business and Technology Association Conference*, Vienna, Austria (pp. 553-539), ISBN: -932917-13-6. USA, Gbata
- Mushemeza, E. D. 2016. Opportunities and challenges of academic staff in higher education in South Africa. *International Journal of Higher Education*, 5: 236-246.
- Ng'ethe, J. M., Namusonge, G. S., & Iravo, M. A. 2012. Influence of leadership style on academic staff retention in public universities in Kenya. *International Journal of Business and Social Science*, 3: 297-302.
- Ntisa, A. A. 2015. Job satisfaction, organisational commitment, turnover intention, absenteeism and work performance amongst academics within South African universities of technology. Unpublished doctorate dissertation, Faculty of Management Sciences, Vaal University of Technology, Vanderbijlpark, South Africa.
- Onah, F. O., & Anikwe, O. S. 2016. The task of attraction and retention of academic staff in Nigeria Universities. *Journal of Management and Strategy*, 7: 9-20.
- Ondari-Okemwa, E. 2011. Knowledge production and distribution by institutions of higher learning in Sub-Saharan Africa: Opportunities and challenges. *South African Journal of Higher Education*, 25: 1447-1469.

- Pithouse-Morgan, K., Masinga, L., Naicker, I., Hlao, T., & Pillay, D. 2016. Sink or swim: Learning from stories of becoming academics within a transforming university team. *South African Journal of Higher Education*, 30: 224-244.
- Saurombe, M.D. 2017. Management perspective on a talent value proposition for academic staff in a merged South African Higher Education Institution. Unpublished Doctoral Dissertation, Department of Industrial Psychology, North-West University, South Africa.
- Selesho, J. M., & Naile, I. 2014. Academic staff retention as a human resource factor: University perspective. *International business & Economic Research Journal*, 13: 295-303.
- Smit, W., Stanz, K., & Bussin, M. 2015. Retention preferences and the relationship between total rewards, perceived organisational support and perceived supervisor support. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, 13: 1-13.
- SPSS Inc. 2019. *SPSS 25 for Windows*. Chicago, IL: Author.
- Sutherland, K., Wilson, M., & Williams, P. 2013. Success in Academia? The experience of early career academics in New Zealand universities. Ako Aotearoa National Centre for Tertiary Teaching Excellence, Wellington, New Zealand.
- Theron, M. 2015. *The development of a scale for talent retention*. Unpublished Doctoral Thesis. Department of Human Resource Management, University of Pretoria, South Africa.

INFLUENCE OF STATUS CONSUMPTION, MATERIALISM AND SUBJECTIVE NORMS ON GENERATION Y STUDENTS' PRICE-QUALITY FASHION ATTITUDE

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—Abstract —

Fashion is regarded as one of the world's largest consumer industries, generating up to 2.5 trillion US Dollars in consumer spending in 2016. South Africa is one of the leading fashion markets in Africa, reaching recorded retail sales revenue of approximately ZAR172 billion by end of 2016. Owing to the intense competition, effective marketing strategies are essential in order for fashion marketers and retailers to differentiate themselves and to target their markets effectively, including when targeting Generation Y consumers. Generation Y are described as the largest and most profitable consumer group for marketers and retailers, representing approximately 36 percent of the South African population in 2018. This generation represents a salient current and future market segment for a variety of industries, including the fashion industry. Therefore, understanding their attitudes towards using price as an indicator of quality for fashion products is likely to be essential in designing marketing strategies to ensure sustained success and growth. As such, the purpose of this study was to determine Generation Y students' price-quality fashion attitude and the influence of the materialistic dimensions of success and happiness, together with the dimensions of fashion status consumption and fashion subjective norms thereon. The study followed a quantitative research approach, whereby self-administered questionnaires were completed by a non-probability convenience sample of 600 students, who were registered at the campuses of three South African public higher education institutions situated in the Gauteng province. The collected data were analysed using descriptive statistics, correlation analysis and regression analysis. The findings of this study suggest that status consumption, materialism and subjective

norms significantly influence Generation Y students' price-quality fashion attitude.

Key Words: Fashion marketing, price-quality fashion attitude, Generation Y students, South Africa

JEL Classification: M31

1. INTRODUCTION

The global fashion industry is regarded as one of the world's largest consumer industries, generating up to 2.5 trillion US Dollars in consumer spending in 2016. With an annual growth rate of 5.5 percent (Amed, Berg, Brantberg & Hedrich, 2016), the fashion industry is regarded as a significant sector of the global economy (Anon, 2018). South Africa's fashion industry is one of the top fashion markets in Africa (Brown, 2013). In 2016, retail sales for fashion consumer goods were recorded at approximately ZAR172 billion (Statistics South Africa, 2017) and continues to experience sound growth in line with inflation, despite a challenging economic climate in recent years (Euromonitor International, 2017). However, the competition amongst fashion marketers and retailers is intense (Brand South Africa, 2014). Therefore, it is essential for fashion marketers and retailers to strengthen their competitive position by developing effective marketing strategies to differentiate themselves and to target their markets effectively (PRNewswire, 2015), including when targeting Generation Y consumers.

Generation Y includes individuals born between 1986 and 2005 (Markert 2004). Described as the largest and most profitable consumer group for marketers and retailers globally (Hassler, 2017), this generation is especially salient to fashion marketers and retailers (Cassidy & Van Schijndel, 2011). Compared to preceding generations, Generation Y individuals were raised in a media- and information-saturated world, which has contributed to them being more connected and, hence, more informed (Bevan-Dye & Surujlal, 2011). Research suggests that they are fashion conscious (Cassidy & Van Schijndel, 2011), sophisticated and consumption-orientated, with a significant level of spending power (Eastman & Liu, 2012). In South Africa, members of the Generation Y cohort represented approximately 36 percent of the South African population in 2018 (Statistics South Africa, 2018). The university student segment of this generation, generally defined as being between 18 and 24 years (Kumar & Lim, 2008), is deemed as being particularly important because individuals who have a tertiary education are likely to have a higher future earning potential, resulting in greater spending

power and social status (Bevan-Dye & Akpojivi, 2016). Generation Y represents an essential current and future market segment for various industries, including the fashion industry, and understanding their attitudes towards using price as an indicator of quality for fashion products is likely to be important for fashion marketers and retailers in developing marketing strategies to ascertain sustained success and growth (PRNewswire, 2015).

Perceived quality is a consumer's evaluation of a product's overall excellence or superiority (Zeithaml, 1988) and influences their product choice (Khare, Ahtani & Khattar, 2014). Consumers evaluate product quality differently, using different cues, such as product experience and price. Specifically, retail price is viewed as the most established predictor of product quality, referred to as the price-quality inference (Priilaid & Hall, 2016), where consumers perceive the price and the quality of a product to be highly correlated (Lichtenstein & Burton, 1989). This consumer tendency suggests that higher-priced products are perceived as being of higher quality than lower-priced products (Lichtenstein, Ridgway & Netemeyer, 1993). A possible reason for the use of price as an assessment of quality is that price is one-dimensional and easier to assess than other multi-dimensional quality indicators. Moreover, price may be assumed to reflect production costs, meaning that high quality products are assumed to be more expensive to produce and, as such, are likely to have a higher price (Gorostidi-Martinez, Xu & Zhao, 2017).

Various studies focusing on the positive relationship between price and quality have been conducted (Wang, Cui, Huang & Dai, 2016; Dodds, Monroe & Grewal, 1991; Rao & Monroe, 1988), including for fashion products (Muruganantham & Priyadharshini, 2017; Parguel, Delécolle & Florence, 2015). While studies pertaining to the antecedents influencing consumers' fashion consumption behaviour, namely status consumption (Heaney, Goldsmith & Jusoh, 2005), materialism (Aydin, 2017) and subjective norms (Ting, Go & Isa, 2018) have been conducted, there is a lack of research on the influence of these antecedents on Generation Y students' price-quality fashion attitude. This is pertinent information for both local and international brands seeking to enter the South African market. As such, the purpose of this study was to determine Generation Y students' price-quality fashion attitude and the influence of materialism, together with the dimensions of fashion status consumption and fashion subjective norms thereon, in the South African context.

2. FACTORS THAT INFLUENCE ATTITUDES TOWARDS PRICE-QUALITY RELATIONSHIPS IN THE FASHION INDUSTRY

2.1. Status consumption

Social status is defined as the hierarchical position or rank held by an individual in a society or a group in the eyes of their significant others (Phau & Teah, 2009; Eastman, Goldsmith & Flynn, 1999). This position is based on their relative wealth, power and prestige and is often conferred by material possessions, measured using factors such as the individual's level of income, type of occupation and education level (Schiffman, Kanuk & Wisenblit, 2010). Therefore, the more possessions an individual has, or the more expensive one's possessions are, the more status one tends to have (Schiffman *et al.*, 2010). Status consumption is the process of obtaining status or social standing by purchasing and consuming products that are considered to be of a high status by the consumer and their significant others (Goldsmith, Flynn, & Kim, 2010). Consumers consuming products for status are motivated by a desire for status and involve a desire to procure status symbols (Sandhu & Paim, 2016), including fashion products and brands (O'Cass & Frost, 2002). Notably, status consumption is not limited to certain social classes or income groups, as some consumers would rather spend their disposable income on status symbols like expensive and branded fashion items rather than on necessities such as food or shelter (Phau & Teah, 2009). According to Eastman and Liu (2012), younger consumers are likely to spend a significant amount of money on branded and status products. Butcher, Phau and Shimul (2017) found that consumers classified under Generation Y have a desire to increase their social status and convey their wealth to others. According to Goldsmith *et al.* (2010), consumers' purchase behaviour is influenced by their desire to increase their social standing or status identity, especially regarding observable products, such as fashion products.

2.2. Materialism

Materialism is a complex, multi-faceted phenomenon (Larsen, Sirgy & Wright, 1999). While generally considered as a negative characteristic associated with greed (Lipovcan, Prizmic-Larsen, Brkljacic, 2015), it also has positive societal influences, such as increasing economic wealth (Richins & Rudmin, 1994). Theoretically, materialism has been viewed from different perspectives, either as a personality trait, relating to possessiveness, non-generosity and envy (Belk, 1985), a set of attitudes (Chan & Prendergast, 2007) or as a continuum value, consisting of success, centrality and happiness (Richins & Dawson, 1992). From a

personality trait approach, Belk (1985) defines materialism as the value a consumer attaches to worldly possessions, whereby “at the highest levels of materialism such possessions assume a central place in a person’s life and are believed to provide the greatest sources of satisfaction and dissatisfaction”. Chan and Prendergast (2007) view materialism as a set of attitudes, which “regard possessions as symbols of success, where possessions occupy a central part of life, and which include holding the belief that more possessions lead to more happiness”. Another widely accepted approach to materialism is that it is the value consumers give to possessions and should be studied within the context of the larger value systems that consumers hold. Therefore, materialistic individuals consider the acquisition of possessions as being central to their lives, bringing them happiness and success (Richins & Dawson, 1992). Based on this value-system approach, Richins and Dawson (1992) developed a scale to measure an individual’s materialistic values, encompassing three themes, namely that possessions are central in a person’s life, that success can be assessed by things people own and the beliefs that possessions lead to happiness. This scale is widely used to measure an individual’s materialistic value (Dingus, 2014) and is a significant predictor of a consumer’s level of fashion consumption (Fitzmaurice & Comegys, 2014). In particular, the two dimensions of success and happiness were assumed essential indicators of materialistic tendency towards the acquisition of fashion products. As such, this study focused on determining Generation Y students’ materialistic tendency towards acquisition as the pursuit of happiness and possession-defined success concerning fashion products.

2.3. Subjective norms

Subjective norms are defined as the social pressure an individual perceives regarding performing or not performing a particular behaviour (Ajzen, 1991), such as to adopt or not adopt a fashion product. Subjective norms are determined by the individual’s normative beliefs concerning others’ expectations, together with the individual’s motivation to conform to those beliefs (Fishbein & Ajzen, 1975). An individual’s subjective norm influences them to believe that individuals forming part of noteworthy reference groups expect them to perform a specific behaviour (Kim, Lee, Yoon, 2015). Normative beliefs start from an individual’s perceived expectations of specific reference groups or others, including friends and family, as well as their motivation to engage in the behaviour (Hoyer, MacInnis & Pieters, 2018; Fishbein & Ajzen, 1975). Kang (2010) concurs that subjective norms are the extent to which individuals are aware of or influenced by the opinions of a salient referent regarding how they should behave. Subjective

norms are integral to purchase behaviour, as purchase behaviour is a function of purchase intention, which, in turn, is a function of subjective norms (Polonsky Vocino, Grau, Garma & Ferdous, 2012). Therefore, consumers who perceive stronger subjective norms pertaining to adopting a fashion product will most likely show greater intent to purchasing a fashion product (Chaplin & John, 2010). Subjective norms are thus the sum total of normative beliefs and motivation to act (Fishbein & Ajzen, 1975) and have a significant influence on attitude (Schepers & Wetzels, 2007). As such, it is important to determine the role that subjective norms play in the prediction of Generation Y students' attitudes towards price-quality relationships in the fashion industry, in the South African context.

3. RESEARCH METHODOLOGY

In this study, the descriptive research design was followed by applying a single cross-sectional approach.

3.1. Sampling method

The population that was targeted in this study was university students aged between 18 and 24, registered at South African public higher education institutions (HEIs). The sampling frame included the 26 registered South African public HEIs (Universities South Africa, 2015), which comprised six universities of technology, nine comprehensive universities and 11 traditional universities. Using non-probability judgement sampling, the sampling frame was reduced to three HEI campuses based in the Gauteng province, namely one university of technology, one comprehensive university and one traditional university. From this sampling frame, a non-probability convenience sample of 600 full-time Generation Y students was selected (200 per institution).

3.2. Measurement instrument and data collection procedure

A self-reporting survey questionnaire was used to collect the required data for this study. The questionnaire comprised a section requesting the sample participants' demographic data and a section containing scales from published studies measuring the influence of the various antecedents on Generation Y students' price-quality fashion attitude. In particular, the scale comprised 19 items, divided into five constructs. The five-item scale developed and validated by Eastman *et al.* (1999) was employed to measure status consumption. A three-item scale was adapted to measure the materialistic dimension of success, while a three-item scale was applied to measure the materialistic dimension of happiness, which were harvested from the 18-item scale developed and validated by Richins and

Dawson (1992). Subjective norms were measured using a five-item scale, which was adapted from the study by Wang, Zhang, Zang and Ouyang (2005). Generation Y students' price-quality attitude was measured using a three-item scale, adapted from the four-item scale developed and validated by Lichtenstein and Burton (1989). Participants had to answer how much they agree or disagree with the statements on a six-point Likert scale that ranged from strongly disagree (1) to strongly agree (6).

Prior to questionnaire distribution to the main sample, the questionnaire was pre-tested using the debriefing approach. Two experienced researchers were invited to participate in the debriefing process. All the remarks and suggestions obtained during the debriefing process were carefully considered and the subsequent changes made to the questionnaire. Following pre-testing, the questionnaire was administered to the main sample. After permission was solicited from lecturers at each of the three HEI campuses, fieldworkers distributed the questionnaires to those lecturers' students. Lecturers were requested to inform students clearly that participation was voluntary. The data captured from the questionnaires were analysed using the Statistical Package for Social Sciences (IBM SPSS), version 25.

4. RESULTS

4.1. Participants

From the 600 questionnaires administered, 491 complete questionnaires were returned, which results in an 82 percent response rate. A frequency analysis was conducted to identify any missing values that may suggest problematic items. After it was determined that there were no missing values, the Mahalaobis distance was employed to identify outliers, which were assessed using the chi-square at $p \leq 0.01$, with the degrees of freedom (df) equating to the number of constructs (Weiner, Schinka & Velicer, 2003). Outliers may seriously alter statistical findings as they represent a marked deviation from the population (Hair, Black, Babin & Anderson, 2010). In this study, there were five constructs, so therefore, any case with a Mahalanobis distance greater than 20.515 (chi-square value for $\alpha=0.001$ at 5 df) constitutes an outlier. Two outliers were detected and removed, which resulted in a total sample size of 489.

The sample comprised each of the seven age groups defined in the target population that ranged from 18 to 24 years of age. There were more female (55.4%) than male (44.6%) participants in the sample. The sample included participants from each of South Africa's nine provinces, with the majority

originating from Gauteng (61.1%), followed by those from Limpopo (12.7%) and Mpumalanga (6.5%). The sample included all of South Africa’s 11 official languages, with the majority indicating being Southern Sotho (25.8%), followed by those indicating being Zulu (21.3%) and Northern Sotho (10%). Table 1 represents a description of the sample participants.

Table 1: Sample description

Age	Percent	Gender	Percent	Province	Percent	Language	Percent
18	13.3	Female	55.4	Eastern Cape	4.5	Afrikaans	5.5
19	22.3	Male	44.6	Free State	5.5	English	4.1
20	19.4			Gauteng	61.1	Ndebele	0.8
21	20.9			Kwazulu-Natal	4.5	Xhosa	8.8
22	13.3			Limpopo	12.7	Zulu	21.3
23	6.3			Mpumalanga	6.5	Northern Sotho	10.0
24	4.5			North-West	0.8	Southern Sotho	25.8
				Northern Cape	3.7	Tswana	9.8
				Western Cape	0.6	Swati	3.5
						Venda	3.1
						Tsonga	7.4

4.2. Descriptive statistics and reliability coefficients

The descriptive statistics and reliability coefficients computed are outlined in Table 2.

Table 2: Descriptive statistics and reliability coefficients

Constructs	Means	Standard deviations	Cronbach alpha values
Price-quality fashion attitude	4.77	1.000	0.635
Status consumption	3.67	1.247	0.845
Material success	4.02	1.208	0.662
Material happiness	4.44	1.189	0.727
Subjective norms	4.87	1.000	0.846

With mean values above 3.5 recorded on a six-point Likert-type scale, as presented in Table 2, the evidence of the sample suggests that Generation Y university students do consider the opinions of others, such as their family, friends and peers (mean = 4.87), have a positive attitude towards using price as an indicator of quality fashion products (mean = 4.77), exhibit materialistic tendencies towards acquisition as the pursuit of happiness (mean = 4.44) and possession-defined success (mean = 4.02), as well as exhibit status consumption tendencies (mean = 3.67) towards fashion products. All the Cronbach alpha values exceeded the recommended level of 0.6, thereby indicating satisfactory internal-consistency reliability (Pallant, 2013).

4.3. Correlation

Pearson’s product-moment correlation coefficients were calculated and assessed to ascertain whether there were statistically significant relationships between status consumption, the materialistic dimensions of success and happiness, subjective norms and Generation Y students’ price-quality attitude towards fashion products. These correlation coefficients are given in Table 3.

Table 3: Relationship between price-quality fashion attitude, status consumption, materialism and subjective norms

Constructs	Price-quality fashion attitude	Status consumption	Material success	Material happiness	Subjective norms
Price-quality fashion attitude		0.404*	0.396*	0.350*	0.485*
Status consumption			0.537*	0.327*	0.337*
Material success				0.322*	0.374*
Material happiness					0.276*
Subjective norms					

*Significant at the 0.01 level (2-tailed)

The correlation coefficients reported in Table 3 provide a clear indication that there are statistically significant positive relationships between Generation Y students’ price-quality fashion attitude, their tendency to engage in status consumption when purchasing fashion products, material success and happiness tendencies and the influence subjective norms have on their fashion consumption. The strongest relationship occurred between status consumption and material success ($r=0.537$, $p\leq 0.01$), followed by price-quality fashion attitude and

subjective norms ($r=0.485$, $p \leq 0.01$), price-quality fashion attitude and status consumption ($r=0.404$, $p \leq 0.01$), price-quality fashion attitude and material success ($r=0.396$, $p \leq 0.01$), and material success and subjective norms ($r=0.374$, $p \leq 0.01$). The weakest correlation coefficient occurred between material happiness and subjective norms ($r=0.276$, $p \leq 0.01$). To determine the influence of status consumption, material success, material happiness and subjective norms on Generation Y students' attitudes towards using price as an indicator of quality for fashion products, regression analysis was conducted. The regression model summary and ANOVA results are given in Table 4.

Table 4: Regression model summary and ANOVA results

	R	R²	Adjusted R²	F	p-value
Model 1	0.582	0.338	0.333	61.83	0.000

As shown in Table 4, the significant F-ratio ($p \leq 0.01$) suggests that the regression model predicts Generation Y students' price-quality attitude towards fashion products. The R^2 value indicates that 33 percent of the variance in Generation Y students' attitude towards using price as an indicator of the quality of fashion products is explained by the four independent variables. However, as 67 percent of the variation is not explained by these four variables, clearly other factors also influence this generation's price-quality fashion attitudes. The next step was to evaluate the contribution of each antecedent's influence on attitude towards using price as an indicator of the quality of fashion products, as reported in Table 5.

Table 5: Contribution of independent variables to influencing price-quality fashion attitude

Independent variables	Standardised coefficient	beta	t-values	p-values
Status consumption	0.170		3.77	0.000
Material success	0.127		2.79	0.006
Material happiness	0.161		4.01	0.000
Subjective norms	0.335		8.19	0.000

The results reported in Table 5 suggest that subjective norms ($\beta = 0.335$, $0.000 \leq 0.01$), status consumption ($\beta = 0.170$, $0.000 \leq 0.01$), material happiness ($\beta = 0.161$, $0.000 \leq 0.01$) and material success ($\beta = 0.127$, $0.006 \leq 0.01$) all have a statistically significant positive influence on Generation Y students' price-quality fashion attitude. The largest beta coefficients were recorded on subjective norms

and status consumption, which means that these two antecedents make the strongest contribution to explaining Generation Y students' attitude towards using price as an indicator of quality for fashion products.

5. CONCLUSION

This study sought to determine the influence of status consumption, materialistic dimensions of success and happiness and subjective norms on Generation Y students' price-quality fashion attitude. The research instrument used in this study comprised 19 items drawn from the existing literature (Wang *et al.*, 2005; Eastman *et al.*, 1999; Richins & Dawson, 1992; Lichtenstein & Burton, 1989). Like previous studies, this study established that Generation Y students exhibit significant status consumption and materialistic tendencies (Bevan-Dye, Garnett & De Klerk, 2012), consider the opinions of others (Kim *et al.*, 2015) and have positive price-quality fashion attitudes (Hanzaee & Taghipourian, 2012). The findings of this study suggest a statistically significant relationship between South African Generation Y students' price-quality fashion attitude, their tendency to engage in status consumption when purchasing fashion products, material success and happiness tendencies and the influence subjective norms have on their fashion consumption. This suggests that Generation Y students' price-quality fashion attitude can be influenced by status consumption, materialistic tendency towards acquisition as the pursuit of happiness and possession-defined success and subjective norms. Specifically, subjective norms and status consumption were found to make the strongest contribution to explaining Generation Y students' price-quality fashion attitude. Marketers and fashion retailers should consider the influence that these antecedents have on price-quality fashion attitude among consumers, and adapt their marketing strategies accordingly. Although all four antecedents are significant positive predictors of Generation Y students' price-quality fashion attitude, the reasonable low R^2 value suggests that other factors also influence their price-quality fashion attitude. Possible additional factors that may influence this target population's price-quality relationship include past experience, brand name, marketing activities, retail store image, celebrity endorsement and product placement. This suggests the need for future research pertaining to the influence of these antecedents on the Generation Y cohort's price-quality fashion attitudes.

Certain limitations in this study are identified. A non-probability convenience sampling was employed to survey the study's participants, which must be considered in interpreting the results. Furthermore, a single, cross-sectional approach was applied; hence, an opportunity exists for a longitudinal study to

determine the changes in South African Generation Y students' price-quality fashion attitudes.

Possible practical marketing implications include, pertaining to subjective norm, marketing campaigns, which can utilise the power and reach of social media to engage with consumers and promote their fashion products, as well as possible increasing positive word-of-mouth. Fashion marketers and retailers should adapt their advertising campaigns to appeal to Generation Y students' material happiness, material success and status consumption tendencies. Owing to Generation Y university students' positive attitude towards using price as a quality indicator towards fashion products, fashion marketers and retailers should aim their advertising campaigns to appeal to the trend-setting characteristics and fashion-conscious nature of the Generation Y members.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Amed, I., Berg, A., Brantberg, L. & Hedrich, S. (2016). *The State of Fashion*. <https://www.mckinsey.com/industries/retail/our-insights/the-state-of-fashion> Accessed 2018/06/02.
- Anon. (2018). *Fashion & Accessories. Statistics and Facts on Fashion & Accessories*. <https://www.statista.com/markets/423/topic/463/fashion-accessories/> Accessed: 2018/06/02.
- Aydin, H. (2017). Influence of self-monitoring and materialism on fashion clothing involvement. *International of Academic Research in Business and Social Sciences*, 7(2), 274-293.
- Belk, R.W. (1985). Materialism: trait aspects of living in the material world. *Journal of Consumer Research*, 12(3), 265-280.
- Bevan-Dye, A.L. & Surujlal, J. (2011). Attitudes towards materialism in sport and materialism tendencies amongst Black Generation Y students. *African Journal for Physical, Health Education, Recreation and Dance, Suppl.*, 1(1), 43-55.
- Bevan-Dye, A. L. & Akpojivi, U. (2016). South African Generation Y students' self-disclosure on Facebook. *South African Journal of Psychology*, 46(1), 114-129.
- Bevan-Dye, A.L., Garnett, A. & De Klerk, N. (2012). Materialism, status, consumption and consumer ethnocentrism amongst black generation Y students in

South Africa. *African Journal of Business Management*, 6(16), 5578-5586.

Brand South Africa (2014). *South Africa's Economy: Key Sectors*. <https://www.brandsouthafrica.com/investments-immigration/economynews/sa-economy-key-sectors> Accessed: 2019/06/20.

Brown, A. (2013). *Africa's Fashion Industry: Challenges, Opportunities*. <http://www.africatrictlybusiness.com/news-analysis/africas-fashion-industry-challenges-opportunities> Accessed: 2018/06/03.

Butcher, L., Phau, I. & Shimul, A.S. (2017). Uniqueness and status consumption in Generation Y consumers. *Marketing Intelligence and Planning*, 35(5), 673-687.

Cassidy, T.D. & Van Schijndel, H. (2011). Youth identity ownership from a fashion marketing perspective. *Journal of Fashion Marketing Management*, 15(2), 163-177.

Chan, K. & Prendergast, G. (2007). Materialism and social comparison among adolescents. *Social Behavior and Personality*, 35(2), 213-228.

Chaplin, L.N. & John, D.R. (2010). Interpersonal influences on adolescent materialism: A new look at the role of parents and peers. *Journal of Consumer Psychology*, 20(2), 176-184.

Dingus, R. (2014). Like it, love it, or gotta have it: relating materialism and attachment. *Atlantic Marketing Journal*, 3(3), 38-47.

Dodds, W.B., Monroe, K.B. & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3), 307-319.

Eastman, J.K., Goldsmith, R. & Flynn, L.R. (1999). Status consumption in consumer behaviour: scale development and validation. *Journal of Marketing Theory and Practice*, 7(3), 41-52.

Eastman, J. K. & Liu, J. (2012). The impact of generational cohorts on status consumption: an exploratory look at generational cohort and demographics on status consumption. *Journal of Consumer Marketing*, 29(2), 93-102.

Euromonitor International (2017). *Apparel and Footwear in South Africa*. <https://www.euromonitor.com/apparel-and-footwear-in-south-africa/report> Accessed: 2018/08/20

Fitzmaurice, J. & Comegys, C. (2014). Materialism and social consumption. *Journal of Marketing Theory and Practice*, 14(4), 287-299.

- Fishbein, M. & Ajzen, I. (1975). *Belief, Attitudes, Intention and Behavior: An Introduction to Theory and Research*. Philippines: Addison-Wesley.
- Goldsmith, R.E., Flynn, L.R. & Kim, D. (2010). Status consumption and price sensitivity. *Journal of Marketing Theory and Practice*, 18(4), 323-338.
- Gorostidi-Martinez, H., Xu, W. & Zhao, X. (2017). A study of the Chinese consumers' product-country image of Spain. *Asia Pacific Journal of Marketing and Logistics*, 29(5), 947-977.
- Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. (2010). *Multivariate data analysis: a global perspective*. 7th ed. Upper Saddle River, NJ: Pearson.
- Hanzaee, K.H. & Taghipourian, M.J. (2012). Attitudes towards counterfeit products and generation differentia. *Research Journal of Applied Sciences, Engineering and Technology*, 4(9), 1147-1154.
- Hassler, J. (2017). *How to Effectively Sell to Millennials*. <https://www.intelliverse.com/blog/how-to-effectively-sell-to-millennials/> Accessed 2019/06/20.
- Heaney, J.G., Goldsmith, R.E. & Jusoh, W.J.W. (2005). Status consumption among Malaysian consumers. *Journal of International Consumer Marketing*, 17(4), 83-98.
- Hoyer, W.D., MacInnis, D.J. & Pieters, R. (2018). *Consumer Behavior*. 7th ed. Mason, OH: South-Western Cengage Learning.
- Kang, D. S. (2010). Understanding of consumption behaviors in art and cultural sectors for developing successful communication plans. *Journal of Targeting, Measurement and Analysis for Marketing*, 18, 263-279.
- Khare, A., Achitani, D. & Khattar, M. (2014). Influence of price perception and shopping motives on Indian consumers' attitude towards retailer promotions in malls. *Asia Pacific Journal of Marketing and Logistics*, 26(2), 272-295
- Kim, S., Lee, J. & Yoon, D. (2015). Norms in social media: the application of Theory of Reasoned Action and personal norms in predicting interactions with facebook page like ads. *Communications Research Reports*, 32(4), 322-331.
- Kumar, A. & Lim, H. (2008). Age differences in mobile service perceptions: comparison of Generation Y and baby boomers. *Journal of Services Marketing*, 22(7), 568-577.
- Larsen, V., Sirgy, J.M., Wright, N.D. (1999). Materialism: the construct, measures, antecedents, and consequences. *Academy of Marketing Studies Journal*,

3, 78-110.

Lichtenstein, D.R. & Burton, S. (1989). The relationship between perceived and objective price-quality. *Journal of Marketing Research*, 26, 429-443.

Lichtenstein, D.R., Ridgway, N.M. & Netemeyer, R.G. (1993). Price perceptions and consumer shopping behavior: a field study. *Journal of Marketing Research*, 30, 234-245.

Lipovcan, L.K., Prizmic-Larsen, Z. & Brkljacic, T. (2015). Materialism, affective states, and life satisfaction: case of Croatia. *SpringerPlus*, 14(4), 699-708.

Markert, J. (2004). Demographics of age: generational and cohort confusion. *Journal of Current Issues and Research in Advertising*, 26(2), 11-25.

Muruganantham, G. & Priyadarshini, K. (2017). Antecedents and consequences of private brand purchase: a systematic review and a conceptual framework. *International Journal of Retail and Distribution Management*, 45(6), 660-682.

O'Cass, A. & Frost, H. (2002). Status brands: examining the effects of non-product-related brand associations on status and conspicuous consumption. *Journal of Product and Brand Management*, 2(2), 67-88.

Pallant, J. (2013). *SPSS Survival Manual*. 5th ed. London: Open University Press.

Parguel, B., Delécolle, T. & Florence, P.V. (2016). How price display influences consumer luxury presentations. *Journal of Business Research*, 69(1), 341-348.

Phau, I. & Teah, M. (2009). Devil wears (counterfeit) Prada: a study of antecedents and outcomes of attitudes towards counterfeits of luxury brands. *Journal of Consumer Marketing*, 26(1), 15-27

Polonsky, M.J., Vocino, A., Grau, S.L., Garma, R. & Ferdous, A.S. (2012). The impact of general and carbon-related environmental knowledge on attitudes and behaviour of US consumers. *Journal of Marketing Management*, 28(3-4), 238-263.

Priilaid, D. & Hall, D. (2016). Price-quality heuristic correlation with rates of product consumption. *British Food Journal*, 118(3), 541-559.

PRNewswire (2015). *With Increased Competition, Clothing and Apparel Companies Must Go the Extra Mile to Establish Brand Loyalty*. Accessed 2019/06/12.

Rao, A.R. & Monroe, K.B. (1988). The moderating effect of prior knowledge on

cue utilization in product evaluations. *Journal of Consumer Research*, 15(2), 253-264.

Richins, M.L. & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: scale development and validation. *Journal of Consumer Research*, 19(3), 303-316.

Richins, M.L. & Rudmin, F.W. (1994). Materialism and economic psychology. *Journal of Economic Psychology*, 15(2), 217-231.

Sandhu, S.S. & Paim, L.B. (2016). Consuming for status among Malaysian working women. *Journal of Emerging Economies and Islamic research*, 4(3), 11-16.

Schepers, J. & Wetzels, M. (2007). A meta-analysis of the technology acceptance model: investigating subjective norm and moderation effects. *Information and Management*, 44(1), 90-103.

Schiffman, L.G., Kanuk, L.L. & Wisenblit, J. (2010). *Consumer Behavior*. 10th ed. Upper Saddle River, NJ: Pearson Prentice Hall.

Statistics South Africa (2017). *Retail Trade Sales (Preliminary): February 2017*. <http://www.statssa.gov.za/publications/P62421/P62421December2017.pdf>
Accessed 2019/07/07.

Statistics South Africa (2018). *Statistical Release P0302: 2018 Mid-year Population Estimates*. <http://www.statssa.gov.za/publications/P0302/P03022017.pdf> Accessed 2019/06/12.

Ting, M.S., Goh, Y.N. & Isa, S.M. (2018). Inconspicuous consumption of luxury fashion goods among Malaysian Adults: an investigation. *Global Business and Management Research: An International Journal*, 10(1), 313-310.

Universities South Africa (2015). <http://www.universitiessa.ac.za/public-universities-south-africa> Accessed 2018/06/12.

Wang, F., Zhang, H., Zang, H. & Ouyang, M. (2005). Purchasing pirated software: an initial examination of Chinese consumers. *Journal of Consumer Marketing*. 22(6), 340 – 351.

Wang, Q., Cui, X., Huang, L. & Dai, Y. (2016). Seller reputation or product presentation? An empirical investigation from cue utilization perspective. *International Journal of Information Management*, 36(3), 271-283.

Weiner, I.B., Schinka, J.A. & Velicer, W.F. (2003). *Research methods in psychology*. 2nd ed. Hoboken, NJ: Wiley.

Zeithaml, V.A. (1988). Extending consumer ethnocentrism theory: the moderating effect test. *Asia Pacific Journal of Marketing and Logistics*, 30(4), 907-926

THE IDENTIFICATION OF FEMALE ENTREPRENEURS' BUSINESS GROWTH FACTORS: EVIDENCE FROM SOUTH AFRICA

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—Abstract—

In recent years, several business success factors that may improve entrepreneurs' business growth have been identified. However, most of these were predominantly focused on traditional male entrepreneurs in developed countries. Although these factors may be applicable to female entrepreneurs in a similar way, they may also be country and culture sensitive. Therefore, the purpose of this study was to identify business growth factors specifically from a female entrepreneur's perspective and within the context of a developing country. The study made use of a descriptive, single-sample cross-sectional design, which involved the use of a structured questionnaire to collect data from the identified sample. The questionnaire was pre-tested and underwent a pilot test before the final version was sent out to the respondents. A combination of two non-probability sampling techniques (purposive and convenience) was used and a total of 510 usable questionnaires were received back and representing female entrepreneurs from all nine provinces. The collected data was statistically analysed and included reliability and validity analysis, descriptive statistics and principal component factor analysis (PCA). The PCA revealed the presence of four factors that were subsequently labelled access to entrepreneurial opportunities, political/community factors, skills and market opportunities, and

internal factors. Furthermore, the respondents identified internal factors such as support from family and friends, having previous experience and working hard skills and market opportunities as the most important business growth factors. The importance of this study to the existing body of literature is twofold: firstly, it adds a female perspective on the most important business growth factors; and secondly, it is from a developing country perspective as this may differ in comparison to developed countries.

Key Words: Female entrepreneurs, South Africa, business growth factors, developing country

JEL Classification: L26

1. INTRODUCTION

Globally, the importance of entrepreneurship has been emphasised as a key driver to the creation of employment opportunities and sustainable economic practices (Kasseeah, 2016; Huggings et al., 2015; Kuratko, 2007; Faizan et al., 2018; Oláh et al., 2019; Meyer & Synodinos, 2019). Meyer and De Jongh (2018) highlight that entrepreneurship does not only contribute to the generation of employment opportunities, but also increases spending in markets, knowledge transfers and innovation. Therefore, the importance of entrepreneurship is strongly recognised in the field of economic growth (Ghura et al., 2017; Benzing et al., 2009; Rasmussen & Sørheim, 2006). Economic growth is described as the increase in resources and the speed of technical transformation, whereby land, labour, capital and entrepreneurship constitute the crucial resources in the factors of production (Bawuah et al., 2006; De Jongh & Mncayi, 2018). Generally, economic growth is fuelled by entrepreneurship, whereby new businesses are established, which creates employment opportunities, strengthens competition and increases productivity through technological change (Ghura et al., 2017). Kuratko (2007) states that the promotion of entrepreneurial activity has led the world economy to accomplish its highest economic performance. According to Gürol and Atsan (2006) and Meyer and Meyer (2017), entrepreneurial activity is utilised within a developed economy as a means to invigorate any stagnant areas and manage unemployment issues. However, within developing economies, entrepreneurial activity is encouraged in order to promote economic growth and wealth creation. Given these facts, it is crucial to develop entrepreneurial skills (Greblikaite et al., 2016). Understandably, entrepreneurial activity can only positively impact on economic growth if businesses are performing favourably. Consequently, business growth is essential to aspects such as job creation and improved socio-economic

condition. Therefore, the purpose of this study was to identify business growth factors specifically from a female entrepreneur's perspective and within the context of a developing country.

2. LITERATURE REVIEW

Interestingly, the presence of entrepreneurial activity is higher in developing economies than what it is in developed economies (Lopez & Alvarez, 2018). Kasseeah (2016) emphasises that multiple developing countries were greatly affected by the financial crisis (Baloch et al., 2018), leaving citizens unemployed and, in turn, increasing the unemployment rate of many economies. Entrepreneurship has been encouraged among disadvantaged populations, especially relating to developing economies, as a means to create employment opportunities and reduce poverty (Altan-Olcay, 2014). In addition, entrepreneurship is seen as a driver of innovation and increased research and development (R&I) in developed economies (Kuratko, 2007). Through the encouragement of entrepreneurship, the unemployed will be able to create employment for themselves and possibly others (Kasseeah, 2016). Djip (2014) argues that despite the vast contributions that entrepreneurship has towards the creation of employment opportunities, it also has multiple benefits that may lead to regional and national improvement. As such, a positive increase in entrepreneurship is regarded as an indication of economic development and enhancement (Greblikaite et al., 2015). Dickes et al. (2017) indicate that entrepreneurship is forming a basis for regional and national economic development exertions.

Within developed and developing countries, the subject of male and female entrepreneurship has gained attention among policymakers (Gorji & Rahimian, 2011, Hamilton, 2015). Traditionally, entrepreneurship was considered to be a male-gendered term that included masculine implications (Yunis et al., 2019). Multiple studies perceived males and females as being similar in the field of entrepreneurship and minimal studies have concentrated on any gender differences that may be present (Meyer, 2018; Morris et al., 2006; Greene et al., 2003). According to O'Neill and Viljoen (2001) and Marlow and Dy (2018), entrepreneurship should be equally encouraged among men and women. However, in recent years, there has been a large rise in the number of female entrepreneurs (Yunis et al., 2019), indicating that entrepreneurial activity has increased tremendously as a result of an increased realisation that women may be a major source of economic growth in multiple countries worldwide (Ali, 2018; Wu et al., 2017; Sadaf et al., 2019). Moreover, female entrepreneurs are likely to

reach a level that is comparable to men in the economy and increase the global gross domestic product by a significant percentage (Pinkovetskaia et al., 2019). Despite the evident contributions that female entrepreneurs bring to the economy, there is limited research about female entrepreneurship (Meyer, 2018, 2019), specifically relating to their business practices, policy, survival and growth strategies, and the perceptions of their entrepreneurial careers (Yousafzai et al., 2018; McClelland et al., 2005). Moreover, Ali (2018) highlights that there has been a lack of research investigating the growth intention of female entrepreneurs and why small female businesses cease to grow.

In comparison to businesses owned by men, female-owned businesses are smaller in size, slower growing and much less lucrative (Jamali, 2009). Female entrepreneurs are known to enter the business environment through small and medium-sized enterprises (SMEs). While SMEs largely contribute to the development of a country, they face multiple challenges, which have created the battle for the entrepreneur owners of SMEs to maintain sustainable and stable growth (Wu et al., 2017). Singh and Belwal (2008) indicate that female entrepreneurs are enthusiastic about owning their own business as they would like to be their own boss, achieve job satisfaction, economic independence or utilise the business as an opportunity to be creative and innovative. However, female entrepreneurs are confronted with multiple barriers that include a lack of management skills, business skills, cashflow, technical skills and the ability to employ qualified staff. Furthermore, female entrepreneurs struggle to establish formal networks and access appropriate technology (Despotović et al., 2018; Ramadani et al., 2015). These barriers can prohibit female entrepreneurs from growing their businesses and reaching success.

According to Costin (2012), small business success and growth are closely linked. Walker and Brown (2004) and Nyoni and Bonga (2018) state that, traditionally, financial aspects have been the most common measure of business success. These measures would include having access to start-up capital or credit, a positive balance statement, a good cashflow and realising a profit (Hall & Fulshaw, 1993; Marlow & Strange, 1994). Although these aspects are very important for a successful business, they are surely not the only measures of success and growth. Some other aspects that may contribute to a business' success rate are listed as possessing experience, social and managerial skills, government support and some political influence, support from family and friends, a good reputation in the community as well as positive market-related facets such as a good product, sound marketing plan and competitive prices (Walker & Brown, 2004;

Hayrapetyan et al., 2016). Bouazza et al. (2015) have highlighted that external and internal factors can influence the performance, growth and success of SMEs. External factors include legal and regulatory frameworks, access to finance and human resource capabilities, whereas internal factors relate to the characteristics of the entrepreneur, managerial capacities, marketing skills and technological capacities. Mehtap et al. (2017) concur, indicating that various factors can either promote or hinder entrepreneurs in businesses. These factors can be divided into two categories, namely external factors on a micro- and macro-level, and internal factors concerning the individual. Moreover, macro-level factors may include market structures and dynamics, easy access to financing, favourable government policies, and political and economic stability. With regard to the external factors on the micro-level, these may include factors relating to the access of business information, networking and general support from family and friends. Lastly, internal factors include the experience, personal traits and aspirations of the entrepreneur.

South Africa, as a developing country, has experienced low levels of entrepreneurial activity, which may have emanated from both personal, internal factors, as well as environmental, external factors (Herrington et al., 2010). According to Meyer and Neethling (2017), South Africa is currently experiencing issues in the socioeconomic, political and macroeconomic areas, which have a relatively large and adverse effect on the economic growth of the country. As a solution to the problems facing South Africa, it is recommended that the government should promote the expansion of business activities and create an enabling environment that allows businesses to grow and flourish. Meyer and Meyer (2016) explain the term, enabling environment, as a mix of conditions that create a favourable setting for businesses and other sectors in the community to thrive. In relation to female entrepreneurship, Singh and Belwal (2008) highlight that female entrepreneurs are confronted with multiple obstacles, which are an indication of an unfavourable business environment, or poor enabling environment. Considering this background, understanding and identifying which business growth factors specifically from a female entrepreneur's perspective and within the context of a developing country are considered most important, may provide some insight on future policy direction.

3. METHODOLOGY

This study employed a descriptive, single-sample cross-sectional design approach. In addition, this study made use of empirical data that was objectively obtained and interpreted through statistical analysis, thereby indicating that a positivist

paradigm formed the philosophical foundations underlying this study. The focus of this study was on female business owners situated within all nine provinces of South Africa, which formed the target population, followed by the sample frame that was drawn from several business associations' databases. The participants in the final sample were screened against three aspects, namely purely being a female business owner, being a female who owns majority shares within a business and being a female who is actively involved in the management processes of the business. Purposive and convenience sampling, as non-probability sampling techniques, was employed for the selection of the sample's participants and a final sample size of 510 female entrepreneurs was established.

The self-administered questionnaire was developed through the use of existing scales and the development of new scales, as guided by the literature. The questionnaire was subject to a content review conducted by topic experts, pre-testing and a pilot study to ensure that it resulted in an effective design. The final questionnaire, which was distributed through trained fieldworkers and electronically, included a section for the collection of general demographic information and multiple sections that contained several constructs pertaining to various entrepreneurial factors, including the business growth factors. Nominal and Likert scales, ranging between 1 (strongly disagree) to 6 (strongly agree), were utilised to gather the participants' responses.

The collected data was statistically analysed, using the Statistical Packages for Social Sciences (SPSS) version 25.00 for Windows, and included reliability and validity analysis, descriptive statistics and principal component factor analysis (PCA).

4. RESULTS AND DISCUSSION

As pointed out in the methodology section, a total of 510 useable questionnaires were received and included as part of the analysis. Table 1 briefly depicts the sample demographics.

Table 1: Sample demographics

Race	(%)	Education	(%)	Age	(%)	Marital status	(%)
African	72	Basic schooling	22.9	< 21 years	3.3	Single	34.9
White	16	Certificate	14.5	21 to 30 years	37.3	Married	34.9
Coloured	9	Diploma	31	31 to 40 years	5.9	Stay together	11
Asian/Indian	3	Degree	17.7	41 to 50 years	34.7	Divorced	10.6
		Postgraduate	13.9	>50 years	18.3	Widowed	6.6

Table 1 portrays that the bulk of the sample were from an African origin (72%), and between the ages of 21 and 30 years and 41 and 50 years, respectively. Most were in possession of some kind of tertiary education and equal groups of the sample were single or married (34.9%).

The scale measuring the business growth factors within the research instrument consisted of 17 items. In order to identify the different growth factors and identify whether any cross-loadings were present, the scale was analysed through principal component analysis (PCA) using the Oblimin rotation method. The suitability of the data was assessed prior to conducting the PCA analysis. On closer inspection of the correlation matrix, several coefficients of above 0.3 were noticed. This indicated that the items included in the scale were indeed correlated to each other. In addition, the Bartlett's test of sphericity returned a significant value (chi-square = 1740.54, 136 df, $p \leq 0.000$) and a Kaiser-Meyer-Olkin (KMO) value of 0.840, exceeding the recommended value of 0.6 were also observed (Bartlett, 1954; Kaiser, 1970). As stated by Field (2009), this suggests that the sample could be deemed suitable and that the data could be further analysed for potential factorability. Table 2 depicts the rotated factors, communalities and eigenvalues for the extracted factors.

Table 2: Rotated factors and eigenvalues

Growth Factor statement	F1	F2	F3	F4	Communalities
Having good social skills is an important factor for the growth of my business	0.766				0.550
Having a reputation for honesty is important for the growth of my business	0.620				0.479
Good general management skills are an important factor for the growth of my business	0.595				0.405
My ability to manage my personnel is a contributing factor to the growth of the business	0.581				0.385
Having a good product or service is an important factor for the growth of my business	0.550				0.430
Promoting my product or service by means of a good marketing strategy contributes to the growth of my business	0.533				0.497
Having competitive prices is an important factor for the growth of my business	0.531				0.389
Access to finance is an important factor for the growth of a business		0.395			0.504
Government support to entrepreneurs is a contributing factor to the growth of the business		0.548			0.487
Entrepreneurial training is an important factor for the growth of my business		0.754			0.624
The entrepreneur's business growth depends on his/her level of education		0.664			0.464
My position in my community and society is important for the growth of my business			0.741		0.584
Having some level of political involvement contributes to the growth of my business			0.731		0.645
Support from my family and friends is important for the growth of my business				0.725	0.583
Hard work ensures the successful growth of my business				0.571	0.500
Good customer service and relations are an important factor for the growth of my business				0.488	0.471
Having previous business experience helps me grow my business more successfully				0.569	0.568
Eigenvalues	4.336	1.887	1.216	1.128	
Cronbach alpha	0.778	0.641	0.411	0.575	

As can be seen from Table 2, the PCA analysis revealed the presence of four factors with an eigenvalue greater than 1, explaining a cumulative variance of

50.39 percent. The extracted factors were subsequently labelled access to skills and market opportunities (F1), entrepreneurial opportunities (F2), political/community factors (F3), and internal factors (F4). Factors 1 to 3 form part of the external environment. Oblimin rotation was executed to support the interpretation of the extracted factors and indicated the presence of a simple structure (Thurstone, 1947). Most loadings were strong and above 0.5, indicating practical significance with the exception of two items only loading 0.488 and 0.395, respectively (Hair et al., 2010). Furthermore, Cronbach alpha's coefficient was used to test for the internal-consistency reliability of the extracted factors. Factors 1 and 2 returned an acceptable value as recommended by Pallant (2010). However, Factors 3 and 4 returned lower than acceptable levels. Pallant (2010) states that scales with fewer items may result in lower Cronbach levels and it may be more fitting to report the inter-item correlation values. In this case, all factors returned values within the recommended ranges of between 0.15 and 0.50 as recommended by Clark and Watson (1995). Therefore, it can be assumed that convergent and discriminant validity was achieved within the various factors. Table 3 depicts the descriptive statistics for the four extracted factors.

Table 3: Descriptive and reliability sample statistics

Factor	Mean	SD	Inter-item Correlation	Skewness	Kurtosis
Skills and market opportunities (F1)	5.06	0.69	0.34	-1.47	4.05
Entrepreneurial opportunities (F2)	4.65	0.92	0.32	-1.16	1.45
Political/community factors (F3)	4.27	1.18	0.27	-0.58	-0.31
Internal factors (F4)	5.13	0.72	0.27	-1.67	4.11

Results from Table 3 indicate that the female entrepreneurs deemed internal factors most important for sustained business growth and success. This factor included aspects such as having support from family and friends, being hard working, having good customer care and relations and having previous business experience. Authors such as Veena and Nagaraja (2013) and Kim and Sherraden (2014) found that female entrepreneurs are more driven by internal motivation such as more freedom, work-life balance and making a difference in society, compared to external motivations such as wealth creation and autonomy. This might also explain why they deem internal factors more important compared to aspects relating political involvement and having status in the community. In addition, setting successful networks and support systems in place can greatly contribute to business success (Lerner et al., 1997). The authors further mention

that networks and support systems provide moral support and business guidance to entrepreneurs in times of need. Other internal areas of importance include a good product and business location, sufficient management capacity, funding and strong motivational factors (Cooney, 2012).

Lerner et al. (1997) mention that environmental influences that can be categorised into either external or internal factors could be considered as important determinants of performance and business growth. Aspects such as government support and market-related factors, including a conducive market environment, competitive prices, an enabling economic environment, functioning legislative systems and access to markets, are seen as external areas of importance (Cooney, 2012). Hattab (2010) remarks that the existence of favourable environmental factors, both internally and externally, contributes greatly to the success and growth of female-owned businesses.

The second most important factor identified by the study refers to skills and market opportunities. This factor included aspects such as social and managerial skills, human resource management, having a good reputation and product or service, having competitive prices and being able to successfully promote one's product and service. Ibeh (2017) lists five aspects that contribute to gender (un)performance. These are motivations and goals, social learning (entrepreneurial socialisation), network affiliation (contacts and membership in organisations), human capital (educational level, business skills) and environmental influences (location, sectoral participation and socio-political variables). Many of these fall within this factor. Furthermore, Wilson et al. (2007) consider that self-efficiency may be linked to an individual's self-perceptions of their capabilities, skills and even attitude. Gender plays a significant role in the self-efficiency phenomenon. Empirical evidence suggests that females may have lower levels of self-perceived skills capabilities, which in some instances may negatively affect their intention and aptitudes towards growing their business. As the female entrepreneurs from this study deemed this factor as rather important, and literature states that in many circumstances female entrepreneurs may need more development in some of these areas, improving skills and market opportunities for female entrepreneurs may prove valuable.

Entrepreneurial opportunities were ranked the third most important growth factor. Aspects such as access to finance, government support, entrepreneurial training and education made up this factor. Access to financial resources has been identified as a main contributor to business success, not only during the start-up phase of a business, but also in order to assure sustained growth (Herrington et al.,

2015). Several financing constraints may act as a barrier to business growth, which include aspects such as strict conditions imposed by banks, cashflow challenges, complicated application processes, high taxes and limited government support (Makina et al., 2015). In addition, entrepreneurial training and education are a controversial matter, as some may say it is a critical part of becoming a successful entrepreneur, while others may argue it is not (Maycotte, 2015). However, it has been identified as a key contributor to entrepreneurial success (Fatoki, 2014). Several studies emphasise the importance of entrepreneurship training and education (Kolvereid & Moen, 1997; Kuratko, 2005; Nabi et al., 2018). Finally, political involvement and community status were listed as the least important factors, although still considered important. Hayrapetyan et al. (2016) mention that government support and some political influence may positively impact on business success. The GEM Consortium (2016) opines that successful entrepreneurs enjoy a higher status in their communities.

5. CONCLUSION

This study set out to identify the most important business growth factors, specifically from a female entrepreneur's perspective and within the context of a developing country. The findings revealed four main growth factors compiled from several internal and external related business matters, namely skills and market opportunities, entrepreneurial opportunities, political/community factors, and internal factors. As all of the individual issues are vital to some extent for future growth and success of businesses, it is not surprising that all of them were deemed important by the female entrepreneurs. Internal factors were, however, deemed most important. Previous studies have also indicated that female entrepreneurs are more compelled by internal motivation. This once again proves that female entrepreneurs have a high internally-driven business nuance. This study highlighted the importance of entrepreneurial research on the female cohort and within a developing country context as it added additional proof of how female entrepreneurs perceive success factors. Limitations include the female sample and future studies may include a comparative study between male and females and also determining whether these specific business growth factors are also considered important in more developed economies.

REFERENCES

Ali, R.S. (2018). Determinants of female entrepreneurs' growth intentions. A case of female-owned small businesses in Ghana's tourism sector. *Journal of Small Business and Enterprise Development*, 25(3), 387-404.

- Altan-Olcay, Ö. (2014). Entrepreneurial subjectivities and gendered complexities: neoliberal citizenship in Turkey. *Feminist Economics*, 20(4), 235-259.
- Baloch, M., Saeed, A., Ahmed, I., Oláh, J., Popp, J., & Máté, D. (2018). Role of domestic financial reforms and internationalization: Evidence from the Chinese market. *Sustainability*, 10(11): 3847, 1-16.p. <https://doi.org/10.3390/su10113847>
- Barlett, M.S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of the Royal Statistical Society*, 16 (Series B), 296-8.
- Bawuah, K., Buame, S. & Hinson, R. (2006). Reflections on entrepreneurship education in African tertiary institutions. *Acta Commercii*, 6(1), 1-9.
- Benzing, C., Chu, H.M. & Kara, O. (2009). Entrepreneurs in Turkey: A factor analysis of motivations, success factors and problems. *Journal of Small Business Management*, 47(1), 58-91.
- Bouazza, A.B., Ardjouman, D. & Abada, O. (2015). Establishing the Factors Affecting the Growth of Small and Medium-sized Enterprises in Algeria. *American International Journal of Social Science*, 4(2), 101-115.
- Clark, L.A. & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7(3), 309-319.
- Cooney, T.M. (2012). Entrepreneurship skills for growth-orientated businesses. Report for the workshop on “skills development for SMEs and entrepreneurship”. Copenhagen. https://www.academia.edu/25433512/Entrepreneurship_Skills_for_Growth-Orientated_Businesses Date of access: 2 Feb. 2018.
- Costin, Y. (2012). In pursuit of growth: an insight into the experience of female entrepreneurs. *International Journal of Gender and Entrepreneurship*, 4(2), 108-127.
- De Jongh, J.J. & Mncayi, P. (2018). An econometric analysis on the impact of business confidence and investment on economic growth in post-apartheid South Africa. *International Journal of Economics and Finance Studies*, 10(1):115-133.
- Despotović, A., Joksimović, M., Jovanović, M. & Maletic, R. (2018). Female entrepreneurship in Montenegro: Motives and barriers. *Agriculture & Forestry*, 64(4), 195-218.
- Dickes, L., Crouch, E. & Walker, T.C. (2017). Local entrepreneurial programming: myth or reality– a southern case study. *Journal of Entrepreneurship and Public Policy*, 6(2), 224-241.
- Djip, V. (2014). Entrepreneurship and SME development in post-conflict societies. The case of Bosnia & Herzegovina. *Journal of Entrepreneurship and Public Policy*, 3(2), 254-274).

- Faizan, R., Nair, S.L.S. & Haque, A.U. (2018). The effectiveness of feminine and masculine leadership styles in relation to contrasting gender's performances. *Polish Journal of Management Studies*, 17, 78-92.
- Fatoki, O. (2014). The entrepreneurial intention of undergraduate students in South Africa: The influences of entrepreneurship education and previous work experience. *Mediterranean Journal of Social Sciences*, 5(7), 294-299.
- Field, A. (2009). *Discovering statistics using SPSS*. 3rd ed. London: Sage.
- Ghura, H., Li, X. & Harraf, A. (2017). Moderating relationship of institutions for opportunity entrepreneurship and economic development. *World Journal of Entrepreneurship, Management and Sustainable Development*, 13(4), 350-374.
- Gorji, M.B. & Rahimian, P. (2011). The study of barriers to entrepreneurship in men and women. *Australian Journal of Business and Management Research*, 1(9), 31-36.
- Greblikaite J., Sroka W., Gerulaitiene N. (2016). Involving young people in Polish and Lithuanian social enterprises by fostering entrepreneurial skills and abilities as entrepreneurial opportunity at university, *Entrepreneurial Business and Economics Review*, 4(3), 131-152. DOI: 10.15678/EBER.2016.040310
- Greblikaite J., Sroka W., Grants J. (2015). Development of social entrepreneurship in European Union: Policy and Situation of Lithuania and Poland, *Transformations in Business & Economics*, 14(2B) (35B), 376-396.
- Greene, P.G., Hart, M.M, Gatewood, E.J., Brush, C.G. & Carter, N.M. (2003). Women entrepreneurs: Moving front and center. An overview of research and theory. *Coleman White Paper Series*, 3, 1-47.
- Gürol, Y. & Atson, N. (2006). Entrepreneurial characteristics amongst university students. *Education and training*, 48(1), 25-38.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. 7th ed. Upper Saddle River, NJ: Pearson.
- Hall, G. & Fulshaw, S. (1993). Factors associated with relative performance amongst small firms in the British instrumentation sector. (In H. Klandt, eds. *Entrepreneurship and Business Development*, Aldershot: Avebury. p. 227-237).
- Hamilton, L. (2015). Generation Y female students' inclination towards entrepreneurship: A comparative study between South Africa and the Netherlands. South Africa: North West University. (Thesis – PhD).
- Hattab, H.W. (2010). The effect of environments' dimensions on the growth of female entrepreneurial projects in Jordan. *Journal of Small Business & Entrepreneurship*, 23(2), 211-223.

- Hayrapetyan, M., Nunes, A. & Turyan, K. (2016). *Factors that drive female entrepreneurship in Armenia In XVII Encuentro AECA*. Bragança. ISBN 978-84-16286-26-3.
- Hayrapetyan, M., Nunes, A. & Turyan, K. (2016). Factors that drive female entrepreneurship in Armenia In XVII Encuentro AECA. Bragança. ISBN 978-84-16286-26-3.
- Herrington, M., Kew, J. & Kew, P. (2010). *Global Entrepreneurship Monitor*. University of Cape Town. Cape Town: South Africa.
- Herrington, M., Kew, J. & Kew, P. (2015). 2014 GEM South Africa report: South Africa: The crossroads – a goldmine or a time bomb? University of Cape Town Centre for Innovation and Entrepreneurship. Cape Town: South Africa.
- Huggins, R., Morgan, B. & Williams, N. (2015). Regional entrepreneurship and the evolution of public policy and governance. Evidence from three regions. *Journal of Small Business and Enterprise Development*, 22(3), 473-511.
- Ibeh, E.M. (2017). Factors affecting performance of women entrepreneurs. *Journal of Women's Entrepreneurship and Education*, 1-2, 39-50.
- Jamali, D. (2009). Constraints and opportunities facing women entrepreneurs in developing countries. A relational perspective. *Gender in Management: An International Journal*, 24(4), 232-251.
- Kaiser, H. (1970). A second generation Little Jiffy. *Psychometrika*, 39, 31-36.
- Kasseeah, H. (2016). Investigating the impact of entrepreneurship on economic development: a regional analysis. *Journal of Small Business and Enterprise Development*, 23(3), 896-916.
- Kim, S.M., & Sherraden, M. (2014). The impact of gender and social networks on microenterprise business performance. *Journal of Sociology and Social Welfare*, 41, 49-69.
- Kolvereid, L. & Moen, Ø. (1997). Entrepreneurship among business graduates: Does a major in entrepreneurship make a difference? *Journal of European Industrial Training*, 21(4), 154-160.
- Kuratko, D.F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29(5), 577-598.
- Kuratko, D.F. (2007). Entrepreneurial Leadership in the 21st Century. *Journal of Leadership and Organizational Studies*, 13(4), 1-11.

- Lerner, M., Brush, C. & Hisrich, R.D. (1997). Israeli women entrepreneurs: An examination of factors affecting performance. *Journal of Business Venturing*, 12, 315-339.
- Lopez, T. & Alvarez, C. (2018). Entrepreneurship research in Latin America: a literature review. *Academia Revista Latinoamericana de Administración*, 31(4), 736-756.
- Makina, D., Fanta, A.B., Mutsonziwa, K., Khumalo, J. & Maposa, O. (2015). Financial access and SME size in South Africa. Occasional Paper (001-2015). University of South Africa.
- Marlow, S. & Dy, A.M. (2018). Annual review article: Is it time to rethink the gender agenda in entrepreneurship research? *International Small Business Journal: Researching Entrepreneurship*, 36(1), 3-22.
- Marlow, S. & Strange, A. (1994). Female entrepreneurs—success by whose standards? *Women in management: A Developing Presence*, 1994, 172-184.
- Maycotte, H.O. (2015). Education vs. entrepreneurship: Which path wins? <https://www.forbes.com/sites/homaycotte/2015/06/02/education-vs-entrepreneurship-which-path-wins/#46a273bc4cdc> Date of access: 20 Jan. 2018.
- McClelland, E., Swail, J., Bell, J. & Ibbotson, P. (2005). Following the pathway of female entrepreneurship. A six-country investigation. *International Journal of Entrepreneurial Behaviour & Research*, 11(2), 84-107.
- Mehtap, S., Pellegrini, M.M., Caputo, A. & Welsh, D.H.B. (2017). Entrepreneurial intentions of young women in the Arab world. Socio-cultural and educational barriers. *International Journal of Entrepreneurial Behavior & Research*, 23(6), 880-902.
- Meyer, D.F. & Meyer, N. (2017). Management of small and medium enterprise (SME) development: An analysis of stumbling blocks in a developing region. *Polish Journal of Management Studies*, 16(1), 127-141.
- Meyer, D.F. & Neethling, J.R. (2017). Measurement of the Enabling Developmental Environment: A Comparative Study in a Developing Region. *Economics and Sociology*, 10(4), 67-82.
- Meyer, N. & de Jongh, J. (2018). The Importance of Entrepreneurship as a Contributing Factor to Economic Growth and Development: The Case of Selected European Countries. *Journal of Economics and Behavioral Studies*, 10(4), 287-299.
- Meyer, N. & Meyer D.F. (2016). The relationship between the creation of an enabling environment and economic development: A comparative analysis of management at local government sphere. *Polish Journal of Management Studies*, 14(2), 150-160.

- Meyer, N. & Synodinos, C. (2019). Entrepreneurial skills, characteristics and intentions amongst unemployed individuals in South Africa. *Journal of Contemporary Management*, 16(2), 1-22.
- Meyer, N. (2018). Research on female entrepreneurship: Are we doing enough? *Polish Journal of Management Studies*, 17(2), 158-169.
- Meyer, N. (2019). South African female entrepreneurs' business styles and their influence on various entrepreneurial factors. *Forum Scientiae Oeconomia*, 7(2), 25-35. DOI: 10.23762/fSo_vol7_no2_2
- Morris, M.H., Miyasaki, N.N., Watters, C.E. & Coombes, S.M. (2006). The dilemma of growth: Understanding venture size choices of women entrepreneurs. *Journal of Small Business Management*, 44(2), 221-244.
- Nabi, G., Walmsley, A., Liñán, F., Akhtar, I. & Neame, C. (2018). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. *Studies in Higher Education*, 43(3), 452-467.
- Nyoni, T. & Bonga, W.G. (2018). Anatomy of the small & medium enterprises (SMEs) critical success factors (CSFs) in Zimbabwe: Introducing the 3E model. *Dynamic Research Journals' Journal of Business & Management (DRJ-JBM)*, 1(2), 1-18.
- O'Neill, R.C. & Viljoen, L. (2001). Support for female entrepreneurs in South Africa: Improvement or decline? *Journal of Family Ecology and Consumer Sciences*, 29, 37-44.
- Oláh, J., Kovács, S., Virglerova, Z., Lakner, Z. & Popp, J. (2019). Analysis and Comparison of Economic and Financial Risk Sources in SMEs of the Visegrad Group and Serbia. *Sustainability*, 11(7): 1853, 1-19. <https://doi.org/10.3390/su11071853>
- Pallant, J. (2010). *SPSS survival manual*. 4th ed. New York, NY: McGraw-Hill.
- Pinkovetskaia, I., Campillo, D.F.A., Bahamón, M.J.R., Gromova, T. & Nikitina, I. (2019). Female entrepreneurship development in the Russian Federation. *Revista Amazonia Investiga*, 8(18), 111-118.
- Ramadani, V., Rexhepi, G., Abazi-Alili, H., Beqiri, B. & Thaçi, A. (2015). A look at female entrepreneurship in Kosovo: an exploratory study. *Journal of Enterprising Communities: People and Places in the Global Economy*, 9(3), 277-294.
- Rasmussen, E. & Sørheim, R. (2006). Action-based entrepreneurship education. *Technovation*, 26, 185-194.
- Sadaf, R., Oláh, J., Popp, J. & Máté, D. (2019). Institutional Ownership and Simultaneity of Strategic Financial Decisions: An Empirical Analysis in the Case of Pakistan Stock Exchange. *E & M Ökonomie a Management*, 22(1), 172-188.

Singh, G. & Belwal, R. (2008). Entrepreneurship and SMEs in Ethiopia. Evaluating the role, prospects and problems faced by women in this emergent sector. *Gender in Management: An International Journal*, 23(2), 120-136.

Thurstone, L.L. (1947). Multiple factor analysis. Chicago: University of Chicago Press.

Veena, M. & Nagaraja, N. (2013). Comparison of male and female entrepreneurs: An empirical study. *International Journal of Engineering and Management Research*, 3(6), 138-143.

Walker, E. & Brown, A. 2004. What success factors are important to small business owners? *International Small Business Journal*, 22(6), 577-594.

Wilson, F., Kickul, J. & Marlino, D. (2007). Gender, entrepreneurial self- efficacy, and entrepreneurial career intentions: implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 31(3), 387-406.

Wu, P., Yao, X. & Muhammad, S. (2017). The effect of female participation in top management teams on the growth performance of small and medium-sized enterprises (SMEs). Evidence from a panel-data analysis in Chinese-listed SMEs. *Asia Pacific Journal of Innovation and Entrepreneurship*, 11(1), 108-119.

Yousafzai, S., Fayolle, A., Saeed, S., Henry, C. & Lindgreen, A. (2018). The contextual embeddedness of women's entrepreneurship: towards a more informed research agenda. *Entrepreneurship and Regional Development*, 167-177.

Yunis, M.S., Hashim, H. & Anderson, A.R. (2019). Enablers and Constraints of Female Entrepreneurship in Khyber Pukhtunkhawa, Pakistan: Institutional and Feminist Perspectives. *Sustainability*, 11(1), 1-20.

COMPARISON BETWEEN SOUTH AFRICAN SERVICE INDUSTRY SECTORS' REQUIREMENTS FROM UNIVERSITY BUSINESS INCUBATORS

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—Abstract —

The South African economy is in dire need of a boost as it is currently being characterised by low growth, high unemployment and poverty. The South African government has prioritised the development of small, medium and micro enterprises (SMMEs) as they are capable of stimulating the economy. However, small organisations face multiple challenges in the stringent economy. University Business Incubators (UBIs) offer support to small organisations and supplement their development to an extent where they may become self-sustainable in the market. UBIs offer incubation programmes, which include a variety of services ranging from physical facilities, general business services, management services, networking and professional services, financial consulting services and university services. To be successful, UBIs should create a balanced fit between their service offerings and the needs of small organisations, as a one-size-fits-all service offering may not succeed when considering different industries, countries and regions. The purpose of this study was to determine the difference between the service industry sectors, namely auto, estate agents and property management, health care and beauty, hospitality and accommodation and professional services, service offering requirements from UBIs. A descriptive research design was followed, whereby a non-probability judgment sample of 108 small service organisations (SSOs), situated in the Vaal Triangle region of South Africa, was taken. A structured self-administered questionnaire, containing the various UBI service offerings, was distributed to the owners or managers of the SSOs. The statistical analysis of the collected data included descriptive statistics and one-way ANOVA. The findings indicate that statistically significant differences were found between the service industry sectors, relating to the physical facilities and

networking and professional service offerings of the UBI. These statistically significant differences were found to have medium effect sizes, pointing towards practical significance. As such, it is recommended that UBIs utilise their service offerings to develop unique marketing strategies for the service industry sectors.

Key Words: Small organisations, SMMEs, University Business Incubators (UBIs), service industry, South Africa

JEL Classification: M, M3, M31

1. INTRODUCTION AND BACKGROUND

South Africa, a developing country, is currently experiencing socioeconomic, political and macroeconomic challenges that are largely related to slow economic growth, high unemployment rates, inequality and an unacceptable level of poverty (Meyer & Neethling, 2017:68; Ladzani, 2013:44). In order to revitalise the economy, the South African government has prioritised the development of SMMEs and entrepreneurship as a means to combat these challenges (Cant & Wiid, 2016:65; Olawale & Garwe, 2010:729; Herrington, Kew & Kew, 2009:12). Djip (2014:254) explains that new organisations are formed through entrepreneurship, which creates the linkage between entrepreneurship and SMMEs. SMMEs are known to uplift the growth of an economy through creating job opportunities, reducing the level of unemployment and poverty and stimulating innovation through entrepreneurial activity, which in turn indicates that SMMEs are vital to the development of a country (Sitharam & Hoque, 2016:227; Cant, Wiid & Kallier, 2015:621). In South Africa, SMMEs constitute about 91 percent of formal organisations and contribute, on average, between 51 and 57 percent towards the gross domestic product (GDP) (Cant & Wiid, 2016:65; Abor & Quartey, 2010:223; Kongolo, 2010:2288). GDP is used to measure the level of economic development by adding the value of the complete number of products and services produced within a specified period of time (Mohr & Fourie, 2004:63).

SMMEs are found in various industries of the economy, which include manufacturing, mining, agriculture and service industries, amongst others. However, the majority of SMMEs are found within the service industry, accounting for approximately two-thirds of the generated employment opportunities within most countries (Muriithi, 2017:38; Kamunge, Njeru & Tirimba, 2014:1). Worldwide, the service industry is recognised as one of the fastest growing industries and within developed countries they make up about 80 percent of the total workforce (Petzer, Steyn & Mostert, 2008:2). The service

industry is taking on a dominating approach in many economies as the industry is seen to generate employment opportunities and contribute towards the economic growth and development of developed and developing countries (Li, Clemes & Gani, 2015:199). In addition, Hipp and Grupp (2005:518) highlight that service organisations vastly contribute to the macroeconomic and social development of an economy. The service industry is one of the fastest growing industries in South Africa, contributing around 65 percent to the GDP (Bhorat, Steenkamp, Rooney, Kachingwe & Lees, 2016:8).

In spite of the multiple contributions SMMEs bring to the various industries, economies and countries, they face multiple challenges and it has been noted that their failure rate is one of the highest worldwide, whereby 75 percent of newly established SMMEs fail to become fully established organisations, (Cant & Wiid, 2016:65). Shockingly, as a result of the multiple challenges that SMMEs face, 40 percent of SMMEs fail within their first year of operation, 60 percent within their second year and approximately 90 percent in the first 10 years of operation (van Scheers, 2011:5048; Cant & Wiid, 2016:65). Moreover, Kamunge et al. (2014:1) and Muriithi (2017:40) highlight that three out of five SMMEs fail to continue with their operations within the first few months. In Africa and more specifically, South Africa, SMMEs are constrained by a limited access to finances and electricity supply, together with a lack of managerial skills, competency and capability, technological capabilities, access to reliable information, government support, crime and corruption, coupled with other challenges relating to political instability, labour issues, increased competition and violent destructions (Muriithi, 2017:40-43; Sitharam & Hoque, 2016:278-279). Furthermore, it has been noted that there are negative perceptions created around the support of SMMEs as the consumers perceive these organisations to lack the ability of delivering a quality service and as such, they prefer to provide their support to larger organisations (Muriithi, 2017:42; Kamunge et al., 2014:1).

Government agencies, institutions and certain private sectors in various regions of South Africa have developed programmes that are aimed at supporting SMMEs (Department of Trade and Industry, 2010:1). Worldwide, business incubators have been recognised as successful institutions that aim to lessen the failure rate of SMMEs by providing them with support to overcome the challenges they are confronted with and creating an environment that ensures growth and sustainability (Raheem & Akhuemonkhan, 2014:73; Al-Mubarak & Busler, 2010:1; Buys & Mbewana, 2007:357). Business incubators offer entrepreneurs business incubation programmes that aim to conquer the barriers that stand in the

way of developing new organisations and provide these entrepreneurs with the necessary resources required to establish, grow and maintain their organisations (Meru & Struwig, 2011:113). According to Kuratko and Hodgetts (2007:264), typical incubator services include providing entrepreneurs, referred to as incubatees, with rental space, shared office services and business consulting support in order to accelerate growth within the early stages of development. Bridge, O'Neill and Cromie (2003:391) concur, indicating that incubation programmes are offered within incubator centres, which thereby enables incubatees to co-locate, rent space and distribute a variety of business services and equipment. Scaramuzzi (2002:4) emphasises that different types of incubators may be found for various reasons.

UBIs, which are formally supported by a university, are recognised as a separate type of business incubator that intends to nurture newly established SMMEs (Todorovic & Suntornpithug, 2008:390). Additionally, UBIs are mainly focused on development whereby new products and/or technologies are the result of transformed research and development outcomes (Bøllingtoft & Ulhøi, 2005:271). Adding to the common business incubator services, UBIs concentrate on offering services that are specifically associated to a university, for instance faculty advisors, student employees, improvement of reputation, library facilities, equipment, mainframe computers, research and development undertakings, technology transfer platforms, employee education and training and other social happenings (Grimaldi & Grandi, 2005:112).

2. PROBLEM STATEMENT

Traditionally, the manufacturing sector, followed by the agricultural sector, received primary attention in relation to the trade and industry policy literature and state departments for trade and industry. The service sector received the least amount of attention as it was non-tradeable and the outputs of this sector were largely determined by the demand of local industry, government and consumers (Hodge, 1998:3). Contractor, Kundu and Hsu (2002:9) concur, indicating that the growth in the service sector, which includes services rendered in the business categories of accountancy, advertising, banking, consultancy, hotels, insurance and legal, amongst other service sectors have reflected minimal research in academic studies. Research on the service sector has been conducted in the areas of performance (Yuliansyah, Rammal & Rose, 2016; Contractor et al., 2002; Brah, Wong & Rao, 2000); innovation (Sheehan, 2006; Hipp & Grupp, 2005; Czarnitzki & Fier, 2002) and growth (Li et al., 2015; Lee & Wolpin, 2006; Wirtz, 2000). However, Rudenko, Zaitseva, Larionova, Chudnovskiy and Vinogradova

(2015:224) highlight that the challenges facing small organisations and the support infrastructure thereof in the service sector, is a topic that is under researched in the current literature.

Jambulingam, Kathuria and Doucette (2004:4) indicate that the organisation categories within the service industry sectors are classified on a general basis. While this may seem necessary, generalisations are made about the particular service industry sector, without taking into account that differences may exist within the industry sector, amongst the organisational categories. Verma and Young (2000:646) concur, arguing that the unique attributes of services have been used to classify the entire service industry sector, failing to consider that the organisation categories within the service industry sector may differ from one another. For example, it would be impractical to assume that the organisation categories pertaining to the professional service industry sector, which include lawyers, accountants, doctors and even architects, are all set up in the same manner, require the same data, equipment or facilities and even experience the same challenges. Brandon-Jones, Lewis, Verma and Walsman (2016:9) highlight that the specific characteristics, namely excessive levels of customer engagement, extensive customisation, knowledge intensity and low levels of capital intensity that may be found amongst the professional service industry sector are not valid in generalising the service industry sector and creating a 'one-size-fits-all' approach. Moreover, the generalisation of the characteristics within the service industry sector may cause managerial challenges. As such, Contractor et al. (2002:9) emphasise that service industry sectors are not homogenous, therefore, the organisations within this sector should not be considered to be alike.

In order for business incubators to be effective, they should consider creating a balance between their service offerings, the needs of incubatees, the business conditions and the state and local culture as these variables may differ across industries, regions and countries; thus, implying that a one-size-fits-all approach is not particularly suited for the service offerings of a business incubator (Maital, Ravid, Seshadri & Dumanis, 2008:2). Colbert, Adkins, Wolfe and LaPan (2010:72) concur, indicating that the stage of the organisations development or industry sector can vastly affect the incubatee's needs and requirements. As such, it is critical that UBI managers investigate the needs of incubatees across industries to confirm that they align with the business incubator service offering.

3. PURPOSE AND OBJECTIVES

The purpose of this study was to determine the difference between the service industry sectors (auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional services) service offering requirements from UBIs. This was determined by the SSOs owners/managers within the five service industry sectors perceptions of the importance of UBI services.

4. RESEARCH METHODOLOGY

A descriptive research design was employed in this study in order to determine the difference between the service industry sectors' service offering requirements from UBIs. The service industry sectors considered for the purposes of this study included auto, estate and property management, health care and beauty, hospitality and accommodation, and professional services. The National Small Business Act (102 of 1996) indicated that, based on the number of full-time paid employees, medium-sized organisations employed between 100 and 200 employees, small organisations employ a maximum of 50 employees, very small organisations a maximum of 10 employees and lastly, micro organisations employ a maximum of five employees. As such, this study concentrated on small, very small and micro organisations, referred to as SSOs, which employed a maximum of 50 employees. The main concentration of this study was on SSOs, defining the target population to be any person currently owning or managing an SSO in the South African context. A list of registered SSOs within the Vaal Triangle region of South Africa was drawn from the Vaal Triangle Info Business Directory (Vaal Triangle Info, 2005), constituting the sample frame for this study. Non-probability judgment sampling was applied and 125 SSOs were selected from this list. Specific attention was given to ensure that the 125 SSOs formed part of the five service industry sectors selected for use in this study. A few other studies, such as Abduh, D'Souza, Quazi and Burley (2007:79) (sample size of 129) and Meru and Struwig (2011:112) (sample size of 124) were used to confirm that the sample size of 125 SSOs was adequate.

The literature on this topic was utilised to develop a scale for the structured self-administered questionnaire of this study. The questionnaire included a cover letter that explained the essential information relating to the study, confidentiality, consent and courteousness. Following the cover letter, demographic information was gathered from the participants within the first section of the questionnaire. The second section contained the 41 items of the scale measuring the SSOs

requirements from UBIs. The scale consisted of six constructs, specifically physical facilities (eight items), general business services (seven items), management services (five items), networking and professional services (seven items), financial consulting services (nine items) and university services (five items). A six-point Likert scale ranging from very unimportant (1) to very important (6) was used to measure the participants' responses for the constructs pertaining to physical facilities (i.e. telephone, computer and network equipment), general business services (i.e. receptionist or secretary, assistance services, inventory management), management services (i.e. business plan development, advertising, human resource management), networking and professional services (internal or external networks, legal counselling and representation), financial consulting services (i.e. financial management, access to bank loans, business taxes) and university services (i.e. student employees, faculty consultants, training and education).

The questionnaire was subject to a pilot test to confirm the reliability of the scale, whereby a convenience sample of 30 owners/managers of SSOs was selected. The selected 30 SSOs were situated in a different region and thus, were not included in the main sample of the study. The 41 itemed scale produced a Cronbach alpha value of 0.941. Malhotra (2010:319) suggests that an acceptable level for the Cronbach alpha value is 0.600, which was realised for each construct that returned values ranging from 0.651 to 0.889. Moreover, this represents internal consistency reliability the individual constructs contained fewer than 10 items each. The entire scale produced an average inter-item correlation value of 0.274, thus falling within the recommended values of 0.15 and 0.50 (Clark & Watson, 1995:316). The questionnaire underwent the procedure of ethical clearance (Ethics Clearance Number: ECONIT-ECON-2014-020), which was gained from the Ethical Committee of the North-West University (Vaal Campus).

The researcher personally visited the owners/managers of the SSOs to gain consent for the questionnaire to be collected, thus following an unsolicited calling approach. Once permission was gained from the owners/managers of the SSOs, the questionnaire was hand-delivered to the participants and a two-week period was allowed for it to be completed before it was collected again. The Statistical Package for Social Sciences (SPSS), version 22 was used to analyse the captured data. Moreover, one-way Anova was utilised to compare the five service industry sectors' requirements from UBIs based on the SSOs owners/managers' perceptions of the importance of UBI services.

5. RESULTS

A response rate of 86 percent was returned, signifying that 108 of the 125 questionnaires were suitable for use. The five industry sectors included auto, estate agents and property management, health care and beauty, hospitality and accommodation and professional services. The sample was split evenly across these five service industry sectors. Table 1 represents the sample participant's demographical information.

Table 1: Sample description

		Frequency (percentage)
Service industry sector	Auto	21 (19.4)
	Estate agents and property management	21 (19.4)
	Health care and beauty	22 (20.4)
	Hospitality and accommodation	20 (18.5)
	Professional	24 (22.2)
Gender	Male	41 (38)
	Female	67 (62)
Position in organisation	Owner	54 (50)
	Manager	54 (50)
Organisations' age	Younger than 5 years	40 (37)
	Over 6 years old	68 (63)
Number of employees	0 – 19 employees	96 (88.9)
	20 – 50 employees	12 (11.1)

The Cronbach alpha value and inter-item correlations were used to confirm the reliability and validity of the research scale. According to Malhotra (2010:319), the Cronbach alpha value should be above 0.600. The Cronbach alpha value returned for the overall 41-item scale was 0.928, with the individual constructs returning Cronbach alpha values of *physical facilities* at $\alpha = 0.695$, *general business services* at $\alpha = 0.688$, *management services* at $\alpha = 0.811$, *networking and professional services* at $\alpha = 0.832$, *financial consulting services* at $\alpha = 0.891$, and *university services* at $\alpha = 0.813$. These values surpassed the recommended value of 0.600. According to Clark and Watson (1995:316), inter-item correlation values between 0.15 and 0.50 approve convergent and discriminant validity. The entire scale returned an inter-item correlation value of 0.243. Furthermore, inter-

item correlation values for the individual constructs ranged between 0.229 and 0.471.

One-way Anova was utilised to compare the five service industry sectors' requirements from UBIs based on the SSOs owners/managers' perceptions of the importance of UBI services. A standardised significance level of $p < 0.05$ was utilised. Table 2 provides an overview of the results.

Table 2: Differences between the service industry sectors' service requirements from UBIs

Construct		Sum of Squares	df	Mean Square	F-ratio	Sig
Physical facilities	Between Groups	10.485	4	2.621	4.577	0.002*
	Within Groups	58.988	103	0.573		
	Total	69.474	107			
General business services	Between Groups	3.084	4	0.771	0.803	0.526
	Within Groups	98.875	103	0.960		
	Total	101.958	107			
Management services	Between Groups	2.230	4	0.557	0.463	0.763
	Within Groups	124.050	103	1.204		
	Total	126.280	107			
Networking and professional services	Between Groups	18.846	4	4.711	5.168	0.001*
	Within Groups	93.891	103	0.912		
	Total	112.737	107			
Financial consulting services	Between Groups	10.543	4	2.636	2.138	0.081
	Within Groups	126.973	103	1.233		
	Total	137.516	107			
University services	Between Groups	5.460	4	1.365	0.913	0.459
	Within Groups	153.937	103	1.495		
	Total	159.397	107			

* Significant at $p < 0.05$

As depicted in Table 2, no statistically significant differences were found between the service industry sectors' requirements from UBIs pertaining to the general

business services, management services, financial consulting services and university services constructs. However, statistically significant differences were established for the physical facilities and networking and professional services constructs. The effect size for physical facilities and networking and professional services, calculated by using Eta squared (η^2), was 0.15 and 0.17, respectively. According to Pallant (2007:208), medium effect sizes, which point towards practical significance, are indicated for both the physical facilities and networking and professional services constructs. Post-hoc comparisons using the Tukey HSD test were utilised to analyse the variances further. As a result, it was indicated that the estate agents and property management service industry sector depicted significant values of $p < 0.05$; thus, indicating that there are differences in the perceived importance of UBI services, with estate agents and property management service sector accounting for the majority of the variances between the physical facilities and networking and professional services constructs.

6. DISCUSSION

The primary objective of this study was to determine the difference between the service industry sectors (auto, estate agents and property management, health care and beauty, hospitality and accommodation, and professional services) service offering requirements from UBIs. This was determined by the SSOs, within the five service industry sectors, owners/managers' perceptions of the importance of UBI services. UBIs are known to provide support to SMMEs so that these organisations can reach high levels of growth and be sustainable in the current market conditions. Subsequently, UBIs have focused their attention on marketing their service offerings to multiple industry sectors in the economy. However, UBIs should consider increasing their marketing approaches to the service industry sectors, especially in South Africa, where SMMEs constitute a large proportion of the service industry. By concentrating on the service industry sector, entrepreneurs can find new creative and innovative ideas that will continue to grow this sector and consequently, lead to increased employment opportunities, growth and development for the economy.

The results of this study indicate that the auto, healthcare and beauty, hospitality and accommodation and professional service industry sectors were in agreement with regards to the SSOs owners/managers perceived importance of UBIs services. However, there was a difference found between the estate agents and property management service industry sector relating to the SSO owners/managers perceived importance of UBI services, specifically within the physical facilities and networking and professional services constructs. This may

be attributed to the estate agents and property management service industry sector requiring more structured services relating to physical facilities and networking and professional services, when compared to the other service industry sectors. This is expectable given that individuals in this sector rely on networking to generate sales as well as leads. Furthermore, such individuals are more likely to require the services of people such as accountants and lawyers on a regular basis in order to complete transactions.

Rudenko et al. (2015:234) have identified that entrepreneurs of small businesses should have expanded knowledge on legal regulations. However, this poses a challenge as many entrepreneurs or owners of SSOs take on the role of a manager, economist, accountant, lawyer, marketer, human-resource manager, amongst others. In line with the results of this study, this may be evident from specific service industry sectors, for example the owner of a beauty salon may take on these various roles themselves, instead of outsourcing the services on which they may lack knowledge. However, with the estate agents and property management service industry sector, these owners or entrepreneurs have no other option but to appoint a professional such as a lawyer in order to complete the sale of a house, for example. Therefore, the importance of the professional services offered by UBIs may be more important to these owners/managers when compared to the other service industry sectors.

7. CONCLUSIONS AND MANAGERIAL IMPLICATIONS

Traditionally, UBIs have offered their services to multiple industry sectors within the economy. However, the service industry has expanded in South Africa with multiple entrepreneurs establishing their organisations within the lucrative industry. UBIs can provide support to these SSOs and develop their potential to become full-fledged organisations that contribute to the sustainability and growth of the South African economy.

On a micro-level, the managers of UBIs should market their services to the five service industry sectors identified in this study as the owners/managers of these SSOs perceived the UBI services as being important. As such, the UBI strategies should be focused on attracting SSOs within the service sector industries and this should be in line with the UBIs vision, mission, goals and objectives. Unique marketing strategies could be developed for the estate agents and property management service industry sector, whereby specialised services could be offered to this sector that will assist them in accessing professional services and establishing networks that will be sustainable for their operations. As such, UBIs

should tailor their service offerings to this specific service industry sector, but they should also focus on marketing their services equally amongst the other service industry sectors.

On a macro-level, business incubators and the government, alike, should increase their focus and support to the organisations developed within the service industry sector in South Africa as these organisations are proving to be a vital contributor towards the development and growth of the economy.

8. LIMITATIONS AND OPPORTUNITIES FOR FUTURE RESEARCH

While this study contributed to the limited literature on the service industry in South Africa, a major limitation is that it only included the service industry located within the Vaal Triangle region. As such, future research can include service industries located within other regions of South Africa, or even other countries around the world.

REFERENCES

- Abduh, M., D'Souza, C., Quazi, A. & Burley, H.T. (2007). Investigating and classifying clients' satisfaction with business incubator services. *Managing Service Quality*, 17(1), 74-91.
- Abor, J. & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39(1), 218-228.
- Al-Mubarak, H.M. & Busler, M. (2010). Business incubators: findings from a worldwide survey, and guidance for the GCC states. *Global Business Review*, 11(1), 1-20.
- Bhorat, H., Steenkamp, F., Rooney, C., Kachingwe, N. & Lees, A. (2016). Understanding and characterizing the services sector in South Africa: An overview. *Wider Working Paper 2016/157*. Helsinki: Unu-Wider.
- Brah, S.A., Wong, J.L. & Rao, B.M. (2000). TQM and business performance in the service sector: a Singapore study. *International Journal of Operations & Production Management*, 20(11), 1293-1312.
- Brandon-Jones, A., Lewis, M., Verma, R. & Walsman, M.C. (2016). Examining the characteristics and managerial challenges of professional services: An empirical study of management consultancy in the travel, tourism, and hospitality sector. *Journal of Operations Management*, 42, 9-24.

- Bridge, S., O'Neill, K. & Cromie, S. (2003). Understanding enterprise, entrepreneurship and small business. 2nd ed. New York: Palgrave MacMillan.
- Bøllingtoft, A. & Ulhøi, J.P. (2005). The networked business incubator – leveraging entrepreneurial agency? *Journal of Business Venturing*, 20(1), 256-290.
- Buys, A.J. & Mbewana, P.N. (2007). Key success factors for business incubation in South Africa: The Godisa case study. *South African Journal of Science*, 103(9-10), 356-358.
- Cant, M.C. & Wiid, J.A. (2016). The use of traditional marketing tools by SMEs in an emerging economy: A South African perspective. *Problems and Perspectives in Management*, 14(1), 64-70.
- Cant, M.C., Wiid, J.A. & Kallier, S.M. (2015). Product Strategy: Factors that influence product strategy decisions of SMEs in South Africa. *The Journal of Applied Business Research*, 31(2), 621-630.
- Clark, L.A. & Watson, D. (1995). Construct validity: basic issues in objective scale development. *Psychological assessment*, 7(3), 309-319.
- Colbert, C., Adkins, D., Wolfe, C. & LaPan, K. (2010). Best practices in action. 2nd ed. Ohio: NBIA.
- Contractor, F.J., Kundu, S.K. & Hsu, C. (2002). A three-stage theory of international expansion: the link between multinationality and performance in the service sector. *Journal of International Business Studies*, 34, 5-18.
- Czarnitzki, D. & Fier, A. (2002). *Do innovation subsidies crowd out private investment? Evidence from the German service sector* (No. 02-04). ZEW Discussion Papers.
- Department of Trade and Industry **see** South Africa. Department of Trade and Industry.
- Djip, V. (2014). Entrepreneurship and SME development in post-conflict societies. The case of Bosnia & Herzegovina. *Journal of Entrepreneurship and Public Policy*, 3(2), 254-274.
- Grimaldi, R. & Grandi, A. (2005). Business incubators and new venture creation: an assessment of incubating models. *Technovation*, 25(2), 111-121.
- Herrington, M., Kew, J. & Kew, P. (2010). Global Entrepreneurship Monitor. University of Cape Town. Cape Town: South Africa.

- Hipp, C & Grupp, H. (2005). Innovation in the service sector: The demand for service-specific innovation measurement concepts and typologies. *Research Policy*, 34, 517-535.
- Hodge, J. (1998). Developing a trade and industry policy agenda for service sectors in South Africa. In *TIPS Annual Forum*.
- Jambulingam, T., Kathuria, R. & Doucette, W.R. (2005). Entrepreneurial orientation as a basis for classification within a service industry: the case of retail pharmacy industry. *Journal of Operations Management*, 23(1), 23-42.
- Kamunge, M.S., Njeru, A. & Tirimba, O.I. (2014). Factors affecting the performance of small and micro enterprises in Limuru town market of Kiambu County, Kenya. *International Journal of Scientific and Research Publications*, 4(12), 1-20.
- Kongolo, M. (2010). Job creation versus job shedding and the role of SMEs in economic development. *African Journal of Business Management*, 4(11), 2288-2295.
- Kuratko, D.F. & Hodgetts, R.M. (2007). *Entrepreneurship: theory, process, practice*. 7th ed. Mason: Thomson South-Western.
- Ladzani, W. (2013). Entrepreneurship. In B.J. Erasmus, J.W. Strydom, & S. Rudansky-kloppers (Ed.) *Introduction to business management*. (pp. 41-67). Cape Town: Oxford.
- Lee, D. & Wolpin, K.I. (2006). Intersectoral labor mobility and the growth of the service sector. *Econometrica*, 74(1), 1-46.
- Li, X., Clemes, M.D. & Gani, A. (2015). An Empirical Analysis of Service Sector Growth in Selected Asian Countries. *International Review of Business Research Papers*, 11(2), 199-212.
- Maital, S., Ravid, S., Seshadri, D.V.R. & Dumanis, A. (2008). Towards a grounded theory of effective business incubation. *VIKALPA*, 33(4), 1-13.
- Malhotra, N.K. (2010). *Marketing research: an applied orientation*. 6th ed. New Jersey: Prentice-Hall.
- Meru, A.K. & Struwig, M. (2011). An evaluation of the entrepreneurs' perception of business-incubation services in Kenya. *International Journal of Business Administration*, 2(4), 112-121.

Meyer, D.F. & Neethling, J.R. (2017). Measurement of the enabling developmental environment: A comparative study in a developing region. *Economics and Sociology*, 10(4), 67-82.

Mohr, P. & Fourie, L. (2004). Economics for South African students. 3rd ed. Pretoria: Van Schaik.

Muriithi, S.M. (2017). African small and medium enterprises (SMEs): Contributions, challenges and solutions. *European Journal of Research and Reflection in Management Sciences*, 5(1), 36-48.

National Small Business Act **see** South Africa.

Olawale, F. & Garwe, D. (2010). Obstacles to the growth of new SMEs in South Africa: a principle component analysis approach. *African Journal of Business Management*, 4(5), 729-738.

Pallant, J. (2007). SPSS survival manual. 3rd ed. New York: McGraw-Hill.

Petzer, D.J., Steyn, T.F.J. & Mostert, P.G. (2008). Competitive marketing strategies of selected hotels: an exploratory study. *South African Business Review*, 12(2), 1-22.

Raheem, S. & Akhuemonkhan, I.A. (2014). Enterprise development through incubation management. *Developing Country Studies*, 4(18), 67-82.

Rudenko, L., Zaitseva, N., Larionova, A., Chudnovskiy, A. & Vinogradova, M. (2015). Socio-economic role of service-sector small business in sustainable development of the Russian economy. *European Research Studies*, 18(3), 223.

Scaramuzzi, E. (2002). Incubators in developing countries: status and development perspectives. <http://documents.worldbank.org/curated/en/186751468770425799/Incubators-in-developing-countries-status-and-development-perspectives> Accessed: 2019/07/02.

Sheehan, J. (2006). Understanding service sector innovation. *Communications of the ACM*, 49(7), 42-47.

Sitharam, S. & Hoque, M. (2016). Factors affecting the performance of small and medium enterprises in KwaZulu-Natal, South Africa. *Problems and Perspectives in Management*, 14(2-2), 277-288.

South Africa. (1996). National Small Business Act 102 of 1996. Pretoria: Government Gazette.

South Africa. (2010). Department of Trade and Industry. National Directory of Small Business Support Programmes. Pretoria.

Todorovic, Z.W. & Suntornpithug, N. (2008). The multi-dimensional nature of university incubators: capability/resource emphasis phases. *Journal of Enterprising Culture*, 16(4), 385-410.

Vaal Triangle Info. (2005). <http://www.vaaltriangleinfo.co.za> Accessed: 2019/07/15.

Van Scheers, L. (2011). SMEs' marketing skills challenges in South Africa. *African Journal of Business Management*, 5(13), 5048-5056.

Verma, R., & Young, S.T. (2000). Configurations of low-contact services. *Journal of Operations Management*, 18(6), 643-661.

Wirtz, J. (2000). Growth of the service sector in Asia. *Singapore Management Review*, 22(2), 37-54.

Yuliansyah, Y., Rammal, H.G. & Rose, E. (2016). Business strategy and performance in Indonesia's service sector. *Journal of Asia Business Studies*, 10(2), 164-182.

MODELLING CONSUMERS' WILLINGNESS TO USE CARD-LESS BANKING SERVICES: AN INTEGRATION OF TAM AND TPB

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—Abstract—

This research seeks to fill the gap in online marketing literature by incorporating the theory of planned behaviour and technology acceptance model by examining the link between variables as well as exploring factors influencing non-users' willingness to use card-less banking services in South Africa. To validate the integrated conceptual framework, primary data were collected from 573 randomly selected banking consumers. A Structural Equation Modelling (SEM) technique was used to analyse data relating to hypothesised relationships in the model. The paper revealed that all the framework variables influence consumer willingness to use card-less banking services. The research paper describes both scholarly and managerial implications of the outcomes and suggestions for future directions for study.

Key Words: E-retail Banking, Technology Acceptance Model, Theory of Planned Behaviour

JEL Classification: M10, M16, M31

1. INTRODUCTION

Technology has been increasingly involved in service delivery in recent years. The use of technology in the delivery of banking services has become the basic operational component of today's banking organisations, allowing cost reduction and improving general operating efficiency (Xue & Hitt, 2011). Although, while technology-based services can be regarded as offering the potential solution for banks' survival in the modern digital age and offering competitive advantage, improving corporate efficiency can be accomplished through consumer recognition or innovation adoption. Several studies have analysed the adoption or acceptance of card-less banking services, however, there is a lacuna on variables that affect the implementation of card-less banking services. Card-less banking services can be described as the distant shipment of retail banking services.

Most South African banks waive bank charges on card-less banking services that are normally provided as bundled banking packages to encourage customers to adopt the service. This is in sharp comparison to in-bank physical transactions attracting high service charges. However, internet access is not an important obstacle to card-less banking implementation in South Africa, as a substantial percentage of account holders have access to the internet. According to the Internet World Stats (2019), out of a population of roughly 58 million (based on the 30 June 2019 estimate), and an internet penetration rate of 56.2 % percent, South African banks have the chance to reach roughly 36 million internet users.

The million-dollar question, however, is what drives customers to use card-less banking facilities in emerging economies? As a precedent of card-less banking acceptance, numerous researchers have suggested distinct factors. For example, some scholars have put forward psychological constructs such as consumer innovation, benefits, trust, self-efficacy, perceived risk, and attitudes to explain online adoption (Yee-Loong Chong, Ooi, Lin & Tan, 2010; Martins et al., 2014). However, some researchers, such as Kim et al. (2009), Lin (2011) and Al-Jabri and Sohail (2012), among others, consider innovation attributes such as perceived relative advantage, ease of use and compatibility, and knowledge-based trust (perceived competence, reliability) as explanations for the adoption of card-less banking by consumers, while studies such as the one conducted by Kesharwani and Singh (2012) have attempted to integrate the trust and perceived risk into TAM to explain internet banking adoption, the psychological and innovation attributes-behavioural intention linkages in relation to card-less banking services adoption remain under-researched.

In addition to this lacuna, there appear to be a dearth of studies that investigate these relationships from an emerging market perspective. The fundamental motivation behind this investigation is to fill this gap. In addition, to the best knowledge of the researchers, none or very few researchers have used Structural Equation Modelling (SEM) to test the causal relationships of the variables under investigation. Regarding the conceptual model proposed in this study, it can be noted that it is one of a kind, as there still remains a dearth of empirical evidence in studies that have tested the variables in the proposed model in relation to the South African context.

Premised on the identified research gaps, the current study investigates the influence of perceived benefit, perceived ease of use, social influence, perceived security, financial and performance risk on consumer willingness to use card-less banking services in South Africa. Over and above, the current study is expected to make academic and practical contributions to the existing services marketing literature and the practice of marketing communication in emerging markets, particularly in South Africa.

2. LITERATURE REVIEW

2.1. Theory of planned behaviour (TPB)

The theory of planned behaviour (TPB) advocates that the fundamental factor in individual behaviour is behavioural intention, which is affected by attitude toward the behaviour, subjective norm, and perceived behavioural control (Ajzen, 2002). Subjective norm (SN) expresses the perceived social pressure of a person who intends to perform the behaviour in question. Explicitly, the subjective norm is relative to normative beliefs about the expectations of significant others. Perceived behavioural control (PBC) concerns beliefs about the existence of control factors that may assist or deter their performing the behaviour. Several studies validated the applicability of TPB to various content domains (Ajzen, 2001). There is significant empirical evidence suggesting that TPB efficiently explicates individual intentions and behaviour in adopting new information technologies which, in this case, is the use of card-less banking services.

2.2. Technology acceptance model (TAM)

Numerous researchers have applied Technology Acceptance Model (TAM) to illustrate an individual's acceptance of new Information Technology (IT) and have ascertained that the perceived usefulness and the perceived ease-of-use are the key variables of individual acceptance (Schierz, Schilke & Wirtz, 2010;

Martins, Oliveira & Popovič, 2014). However, these two factors may not precisely reflect the acceptance of card-less banking use. Using TAM and TPB as theoretical bases, this study has theorised and examined an integrated model to explain various factors affecting individual usage of card-less banking in South Africa. Integrating the traditional constructs of TAM, perceived ease of use and perceived benefit, and the TBP constructs of social influence and behavioural intention, new constructs of perceived financial risk, perceived security risk and perceived performance risk have been added to the model. The *raison d'être* behind incorporating perceived risk in the model is to draw managerial attention to the critical challenges and to proffer safe and secure virtual environments that empower customers to make absolute use of card-less banking services.

2.3. Card-less banking characteristics

Card-less banking services enable customers to transfer funds electronically, either for under-banked or banked, using an ATM, self-service kiosk, mobile or internet banking (Kinsman, 2019). Moodley-Isaacs (2011) adds that card-less facilities provide access to banking services for customers, such as transferring money to people, regardless of whether they are banked or not. Innova (2015) also relates to card-less banking is a service that enables customers to allow another person to withdraw cash from an ATM without using a card. It can therefore be concluded that card-less banking facilities are a platform that offers access to banking services to people without the need for a card to be used. Other forms of card-less banking, including ATMs, self-service kiosks, mobile apps, and internet banking, may be used by consumers to access their accounts and make transactions using their own personal details to obtain access (Kinsman, 2019). Four types of card-less banking facilities are accessible, including withdrawal of cardless money, mobile banking, internet banking, and biometric banking. Card-less money withdrawal is a facility allowing account holders to withdraw money from an account without an eligible card being used (Istrate 2014). Mobile banking is a scheme that enables a financial institution's customers to perform multiple financial transactions using mobile devices such as cell phones and tablets (Asfour & Haddad 2014). Chavan (2013) describes internet banking as the use of an internet-connected device for the purpose of making payment orders, transfers, exchanges and viewing the account status. Biometric banking enables the use of biometric authentication technology to verify physiological features such as a consumer's voice, fingerprint or iris identification on their mobile banking equipment to obtain access to their accounts and to execute their required financial transactions (Bhosale & Sawant 2012).

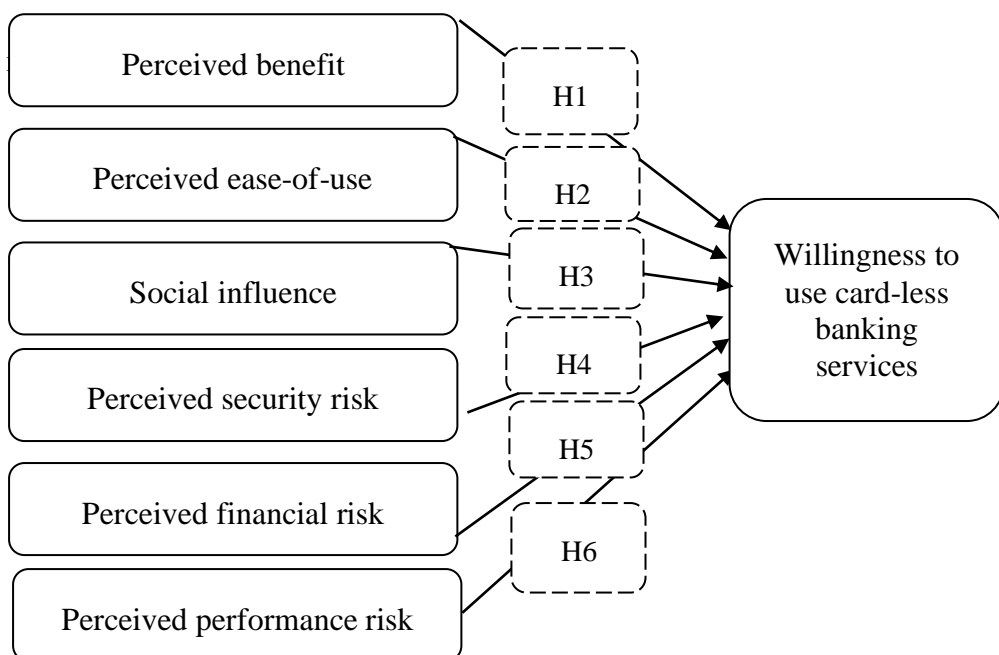
2.4. Willingness to use card-less banking services

Willingness to use card-less banking services is the key dependent variable of the model, derived from TPB, that hypothesises that behavioural intentions are the main predictors of actual behaviour (Ajzen, 1991). This paper describes the willingness to use as the inclination of the individual to use or reuse the bank's transactional card-less banking services. Several studies have recognised behavioural variables affecting individual internet buying intentions such as self-efficacy (Amaro & Duarte, 2015); word of mouth (Erkan & Evans, 2016). The adoption of elements from TAM, TRA, TPB to explain and predict behavioural intention and subsequently, the actual behaviour, is of the greatest significance. The hypothesis is that intentions capture the motivational variables influencing real behaviour, hence the greater the desire to participate in behaviour, the greater the performance. In this research, the willingness to use card-less banking services is the power of the consumer's intention to use and/or reuse card-less banking services in a banking transaction.

3. Conceptual model and hypothesis development

This research integrates TAM and TPB into a comprehensive structure to examine customers' card-less banking service intention and adoption. To empirically test the interrelationships between constructs, a conceptual model was developed, based on the reviewed marketing, and especially consumer behaviour, literature. This conceptualised research model is shown in Figure 1.

Figure 1: Conceptual Model



3.1. Perceived benefit and behavioural intention

Perceived benefit is the extent to which a customer thinks that using an innovation will improve his or her efficiency. In this research, perceived benefit is classified as comfort associated with the extrinsic benefits of using card-less banking facilities (i.e. service-side). However, research shows that elevated rates of perception of benefits towards an item accelerate a consumer's behavioural orientation. Therefore, this study seeks to empirically explore the connection between perception of advantages and readiness to use card-less banking services.

H1: Perceived benefit positively affects willingness to use card-less banking services.

3.2. Perceived ease-of-use and behavioural intention

Perceived ease-of-use is conceptualised as an individual's evaluation of the rational effort involved in the use of information technology (IT) (Venkatesh, Thong & Xu, 2012). Venkatesh (2000) found several determinants of perceived ease-of-use by integrating internal control (computer self-efficacy) and external control (facilitating condition) into TAM. Existing literature indicates that perceived ease-of-use has a positive and significant effect on perceived usefulness in the context of online banking (Lee, 2009; Martins, Oliveira & Popovič, 2014). Customers are therefore more likely to use card-less banking services if the process is user-friendly, which can be influential using technology. It can therefore be hypothesised that:

H2: Perceived ease-of-use positively affects willingness to use card-less banking services.

3.3. Social influence

Several studies have commonly recognised the impact of social influence on behaviour in accepting technology. While several researchers have argued that the structure has restricted conceptualisation owing to its focus on the normative portion of societal views rather than broader societal contexts, Conner and Armitage (1998) and Terry and Hogg (2000) claim the opposite and this is the suggestion to further test the theoretical connection between social influence and adoption of technology. While TPB has a direct connection between subjective norm and purpose, TAM breaks down subjective norm into two further theoretical constructs: internalisation and picture (Venkatesh & Davis, 2000). Internalisation is an informational social influence, defined as the absorption of data by the individual as proof of truth, arising from normative views and behavioural values

developed by other people, organisations, or society. In the present context, if a colleague / family member recommends the use of card-less banking services as a banking channel in a positive way, an individual may also think in its usefulness and readiness to use it in turn. From the inferences, therefore, we hypothesise:

H3: Social influence positively affects willingness to use card-less banking services.

3.4. Perceived risk

Perceived risk is described as the uncertainty and unfavourable effects connected with the expectations of customers (Kesharwani & Singh Bisht, 2012). Perceived risk therefore represents the perception of the consumer about the degree of subjective uncertainty of results. The spatial and temporal separation between customers and retail banking in internet services generates implicit uncertainty about banking operations (Al-Gahtani, 2011). Thakur and Srivastava (2014) evaluated perceived danger as a factor of second order and their findings endorsed the hypothesis that risk adversely impacts the intention of adoption. However, some studies have endorsed, and dismissed in others, the impact of perceived danger on the intention of adoption (S'anchez-Fern'andez, & Mu al-noz-Leiva, 2014; Wang & Yi, 2012). This research therefore focuses on perceived risk of card-less banking services and suggests:

H4: Perceived security risk negatively affects willingness to use card-less banking services

H5: Perceived financial risk negatively affects willingness to use card-less banking services.

H6: Perceived performance risk negatively affects willingness to use card-less banking services.

4. METHODOLOGICAL ASPECTS

For this study, the research philosophy was positivism. A quantitative research method has therefore been used for this study. The design was appropriate for requesting the necessary data on perceived benefit, perceived ease-of-use, social influence, perceived security risk, perceived financial risk, perceived performance risk and consumer willingness to use card-less banking services. Furthermore, the strategy allows one to investigate the causal relationships with the constructs used in the research.

4.1. Sample and data collection

The target population for this study was South African consumers in Gauteng who hold a bank account. A mall intercept survey was used. Four shopping malls in Johannesburg were selected for the survey. Of the total, 573 usable questionnaires were retrieved for the final data analysis, representing a response rate of 84 per cent. The research participants consisted of a slightly higher proportion of females than males. To eliminate differences in response patterns due to different reference points, all respondents were encouraged to answer the questionnaire with reference to card-less banking services with guidance from research assistants.

4.2. Measurement instrument and questionnaire design

Research scales were operationalised based on extant work. Proper modifications were made to fit the current research context and purpose. Section A of the questionnaire elicited general and biographical information about respondents. Perceived benefit was measured through questions adapted from Matikiti, Mpinganjira and Roberts-Lombard (2017). Additionally, perceived ease of use was assessed by questions adapted from Davis (1989). Social influence was also measured through questions adapted from Matikiti, Mpinganjira and Roberts-Lombard (2017). Questions on perceived security risk were adapted Hanafizadeh and Khedmatgozar (2012). In addition, perceived financial risk was also assessed using six items adapted from Hanafizadeh and Khedmatgozar (2012). Furthermore, questions on perceived performance risk were measured from items adapted from Artuğer (2015). Finally, intention to use card-less banking services was assessed using nine items adapted from Ali (2011). All measurement items were measured on a five-point Likert-scale and the scale indicators were affixed to a strongly disagree (1) to strongly agree (5) Likert-scale continuum.

5. RESULTS

5.1. Descriptive Statistics

The respondents were predominantly females (56.4 per cent). The median age group of the respondents was less than 28 years (41.4 per cent). 77% of the respondents had medium or easy access to internet and 53% had medium internet usage skill while 78% mostly use the Internet for more than three hours per week.

5.2. STRUCTURAL MODEL RESULTS

5.2.1. Data Analyses and results

A two-step procedure was applied to analyse the data (Anderson & Gerbing, 1988). Thus, the accuracy of multi-item construct measures was assessed followed by a test of the research model and hypotheses. In this study, a structural equation modelling (SEM) approach using AMOS (25) statistical software was used to test the posited hypotheses in the conceptual model.

5.2.2. Measurement accuracy analyses

To examine the reliability and validity of the multi-item measures, confirmatory factor analysis (CFA) was performed. Preliminary specification search led to the deletion of some of the items in the constructs scale to provide acceptable fit. The overall model fit in both measurement and structural models was observed using goodness-of-fit indices. Recommended statistics for the overall model assessment indicated an acceptable fit of the measurement model of data, that is: $\chi^2/(\text{df}) = 1.724$; CFI=0.968; TLI=0.959; IFI= 0.968; RMSEA=0.052 (Hair, Ringle & Sarstedt, 2011).

5.2.3. Reliability and validity measures

Composite reliability (CR) and Average Variance extracted (AVE) for each construct were calculated using the formulae proposed by Fornell and Lacker (1981). Based on the results shown in Table 1, the values were above the recommended thresholds (Hair et al., 2010), therefore indicating the presence of convergent validity and validating an outstanding internal consistency and reliability of the measurement instruments used, with more than 60% of each item's variance shared with its respective construct. Discriminant validity was established through comparison of shared variance between constructs with the average variance extracted for each multi-item construct (Nunnally & Bernstein, 1994). Using the squared multiple correlation (SMC) to the variance of each indicator variable, all values of SMC are greater than the threshold of 0.30 (Bagozzi & Yi, 1988); Cronbach alpha values are more than the acceptable cut-off criterion of 0.7 (Hair et al., 2010)

Table 1: Accuracy Statistics Analysis

Research Construct	Item	α	C.R.	AVE	λ	SMC
Intention to use card-less banking services (ITU)	ITU1				0,915	0,837
	ITU2				0,886	0,785
	ITU3				0,835	0,697
	ITU4	0,934	0,91	0,76	0,895	0,801
Perceived Benefit (PB)	PB1				0,678	0,460
	PB2				0,689	0,475
	PB3	0,788	0,75	0,61	0,862	0,743
Perceived ease-of-use (PEOU)	PEOU1				0,908	0,824
	PEOU2				0,753	0,567
	PEOU3	0,860	0,81	0,58	0,769	0,591
Social influence (SI)	SI1				0,661	0,437
	SI2				0,861	0,741
	SI3				0,924	0,854
	SI4	0,898	0,91	0,71	0,896	0,803
Perceived security risk (PSR)	PSR1				0,811	0,658
	PSR2				0,854	0,729
	PSR3	0,810	0,82	0,60	0,652	0,425
Perceived Financial risk (PFR)	PRF1				0,757	0,573
	PRF2	0,719	0,55	0,55	0,743	0,552
Perceived performance risk (PPR)	PPR1				0,770	0,593
	PPR2	0,742	0,59	0,59	0,767	0,588

NOTE: CR: Composite Reliability; AVE: Average variance extracted; λ =standardized factor loading; SMC = squared multiple correlation; α =Cronbach alpha;

*Scores: 1- strongly Disagree 3-Nuetral 5- Strongly Agree

Measurement CFA model Fit: $\chi^2/ (df) = 2.222$; GFI=0.881; CFI=0.945; TLI=0.931; IFI= 0.945 and RMSEA=0.067.

5.3. Research model assessment and hypotheses testing

The results of the structural model indicate adequate fit with the observed data, compared with the suggested fit criteria. The individual hypothesis testing results as shown on Table 2 indicate the following path co-efficient: H1 (0.315), H2 (0.901), H3 (0.225), H4 (-0.088), H5 (-0.097) and H6 (0.028). All the hypotheses coefficient values were significant, except for H6. Therefore, these results provide support for all the proposed hypotheses, except hypothesis six (6). Given the non-significance of perceived performance risk on behavioural intention, H6 is rejected.

Table 2: Analysis of the research structural model related hypothesis

Path	Hypothesis	Path Coefficient Values β	P value	Result
PB-> ITU	H1	0,901	***	Supported and significant
PEOU-> ITU	H2	0,315	***	Supported and significant
SI-> ITU	H3	0,225	***	Supported and significant
PSR-> ITU	H4	-0,088	0,024*	supported and significant
PFR-> ITU	H5	-0,097	0,054*	supported and significant
PPR-> ITU	H6	0,028	0,587	Not supported and Insignificant

NOTES: *significance level<0.05; ** significance level<0.01; ***significance level <0.001; ns- not significant

Research structural model fit: $\chi^2 / (df) = 1.921$; CFI=0.958; GFI=0.901; TLI=0.948; IFI= 0.958; RMSEA=0.058

Notably, hypotheses H1, H2, H3 H4 and H5 are found to be positive and significant. By implication, this finding indicates that the individual's willingness to use card-less banking services could be affected positively by perceived benefit (H1), perceived ease-of-use (H2) and social influence (H), and negatively by perceived security risk (H4) and perceived financial risk. However, this is contrary to Wu and Wang's (2005) finding which found a positive relationship between risk perception and behavioural intention to use online commerce, specifically mobile commerce. The positive relationship between perceived ease-of-use and intention to use card-less banking service can be attributed to the assertion that perceived ease-of-use has a direct and significant effect on behavioural intention to use an online service when the consumer has little or no direct experience with the specific system. Mostly, consumers change their ease-of-use perception about a specific service over time after experiencing, and frequently transacting, using the service.

6. DISCUSSION AND CONCLUSIONS

This paper creates a wide range of interrelationships between variables theoretically and examines their relative impact on consumer willingness to use card-less services for banking transactions. Specifically, this research postulates that consumers' perception of use benefit significantly affects their willingness to use card-less banking services in a positive way while their perception of risk negatively impacts on their intention to use the card-less services. The research findings confirm the TAM relationship hypothesised by Davis (1989) and other extant literature that supports the assertion that PEOU is an antecedent of behavioural intention (Venkatesh & Davis, 2000; Wang et al., 2008). This research draws similarities between perceived behavioural control (Ajzen, 2002) and perceived performance risk (PPR) in that both depend on volition. The study results indicate that behavioural intention to use card-less banking services is also influenced by security risk and financial risk perception. Contrary to Ajzen (2002), the study found that there is no significant relationship between intention to use card-less banking services and perceived performance risk hence H6 is rejected.

7. IMPLICATIONS

This research discovered that consumers' risk perception, except performance risk, affect their willingness to use card-less e-retail banking services. The findings indicate that reducing risk perception will positively change consumers' attitude towards e-retail banking. Overall, this study found that as much as ease-of-use, social influences are important factors, perceived risks are equally critical in influencing an adoption of an innovation. Therefore, reducing risk perception should also be a priority. Better understanding of consumer risk/benefit perceptions of card-less banking can provide a useful marketing tool to maximise consumer experiences with online transactions. This study further found that perceived benefit, perceived ease-of-use, social influence, perceived security risk and perceived financial risk drive consumers' willingness to use online card-less banking services. Although the loadings were not very distinct, this research discovered that perceived benefit is more influential than perceived ease-of-use in affecting the implementation of card-less banking facilities.

8. LIMITATIONS

As this research attempted to explain the impacts of consumers' risk/ benefit perceptions on behavioural intention, there were a few constraints. These constraints indicate additional research. This research concentrated on the immediate effects of dependent variables. Further studies may define mediating and/or moderating factors that further explain the variance in interactions between consumer perceptions of risk / benefit and behavioural intention. Second, this research tested the suggested model with information gathered from one significant province. Therefore, gathering information from a more varied group of individuals in distinct geographic areas would increase the usefulness of the data.

9. CONCLUSION

The purpose of this research was to investigate the impact of perceived benefit, perceived ease-of-use, social influence, perceived security risk, perceived financial risk, perceived performance risk on consumer willingness to use card-less banking services in South Africa. In addition, the study validates the assumption that factors such as perceived benefit, perceived ease-of-use, social norms, perceived security, financial and performance risk are instrumental in stimulating consumer willingness to use card-less banking services. A robust relationship was also found on the nexus between perceived benefit and consumer willingness to use card-less banking services. Managerial implications of the

findings were discussed, and limitations and future research directions were indicated. This study contributes, above and beyond, new knowledge to the existing African setting on consumer behaviour literature – a research context that is neglected in academia.

REFERENCES

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational behaviour and human decision processes*, 50(2), 179-211.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual review of psychology*, 52(1), 27-58.
- Ajzen, I. (2002). Perceived behavioural control, self-efficacy, locus of control, and the theory of planned behaviour 1. *Journal of applied social psychology*, 32(4), 665-683.
- Al-Gahtani, S.S. (2011). Modeling the electronic transactions acceptance using an extended technology acceptance model. *Applied computing and informatics*, 9(1), 47-77.
- Ali, A., (2011), 'Predicting individual investors' intention to invest: An experimental analysis of attitude as a mediator', *International Journal of Human and Social Sciences* 6(1), 57–73.
- Al-Jabri, I. M., & Sohail, M. S. (2012). Mobile banking adoption: Application of diffusion of innovation theory. *Journal of Electronic Commerce Research*, 13(4), 379-391.
- Amaro, S. & Duarte, P. (2015). An integrative model of consumers' intentions to purchase travel online. *Tourism management*, 46, 64-79.
- Anderson, J.C. & Gerbing, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
- Artuğer, S. (2015). The effect of risk perceptions on tourists' revisit intentions. *European Journal of Business and Management*, 7(2), 36-43.
- Asfour, H.K. & Haddad, S.I. (2014). The impact of mobile banking on enhancing customers' e-satisfaction: An empirical study on commercial banks in Jordan. *International Business Research* 7(10), 145–169.
- Bagozzi, R.P. & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1), 74-94.

- Bhosale, S.T. & Sawant, B.S. (2012). Security in e-banking via cardless biometric ATMs. *International Journal of Advanced Technology and Engineering Research*, 2(4), 9–12
- Chavan, J. (2013). Internet banking: Benefits and challenges in an emerging economy. *International Journal of Research in Business*, 1(1), 19–26.
- Conner, M. & Armitage, C.J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of applied social psychology*, 28(15), 1429-1464.
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Davis, F.D., (1989), 'Perceived usefulness, perceived ease of use and user acceptance of information technology', *MIS Quarterly* 13(2), 319–340
- Erkan, I. & Evans, C. (2016). The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption. *Computers in Human Behaviour*, 61, 47-55.
- Hair, J.F., Ringle, C.M. & Sarstedt, M. (2011). PLS-SEM: Indeed, a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hanafizadeh, P., Hosseinioun, S.S. & Khedmatgozar, H.R., (2015), 'Financial valuation of a business model as an intangible asset', *International Journal of E-Business Research* 11(4), 17–31.
- Innova (2015). iMobile bank cardless cash, viewed 18 August 2019, from <http://www.innova.com.tr/pdfs/9f550ad5-c61d-423f>
- Internet World Stats (2019). Internet penetration in Africa, June 30, 2019. Online Accesss [<https://www.internetworldstats.com/stats1.htm>] Date of access: 18/08/2019
- Istrate, C. (2014). Cardless withdrawal system for mobile banking applications. *Journal of Mobile, Embedded and Distributed Systems*, 5(1), 11–16
- Kesharwani, A. & Singh Bisht, S. (2012). The impact of trust and perceived risk on internet banking adoption in India: An extension of technology acceptance model. *International Journal of Bank Marketing*, 30(4), 303-322.
- Kim, G., Shin, B. & Lee, H.G. (2009). Understanding dynamics between initial trust and usage intentions of mobile banking. *Information Systems Journal*, 19(3), 283-311.

- Kinsman, J.E. (2019). Cardless banking in the Nelson Mandela Metropole: A means of financial inclusion for the excluded. *Journal of Economic and Financial Sciences* 12(1), a182. <https://doi.org/10.4102/jef.v12i1.182>.
- Lee, M.C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic commerce research and applications*, 8(3), 130-141.
- Lin, H.F. (2011). An empirical investigation of mobile banking adoption: The effect of innovation attributes and knowledge-based trust. *International journal of information management*, 31(3), 252-260.
- Martins, C., Oliveira, T. & Popovič, A. (2014). Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. *International Journal of Information Management*, 34(1), 1-13.
- Matikiti, R., Mpinganjira, M. & Roberts-Lombard, M., (2017), 'Social media in tourism: Establishing factors influencing attitudes towards the usage of social networking sites for trip organisation', *Acta Commercii* 17(1), a396. <https://doi.org/10.4102/ac.v17i1.396>
- Moodley-Isaacs, N. (2011). *Use your cellphone to draw cash*, viewed 18 August 2019, from <http://www.iol.co.za/personal-finance/my-money/banking/use-your-cellphone-to-draw-cash-1062775>
- Nunnally, J. C. (1994). *Psychometric theory*. 3rd ed.. New Delhi: Tata McGraw-Hill Education.
- Schierz, P.G., Schilke, O. & Wirtz, B.W. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis. *Electronic commerce research and applications*, 9(3), 209-216.
- Terry, D. J., & Hogg, M. A. (2000). *Attitudes, behaviour, and social context*. Upper Saddle River, New Jersey: Psychology Press.
- Thakur, R., & Srivastava, M. (2014). Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India. *Internet Research*, 24(3), 369-392.
- Venkatesh, V. & Davis, F.D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186-204.

Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, 36(1), 157-178.

Wang, C.C., Lo, S.K. & Fang, W. (2008). Extending the technology acceptance model to mobile telecommunication innovation: The existence of network externalities. *Journal of Consumer Behaviour: An International Research Review*, 7(2), 101-110.

Wang, L., & Yi, Y. (2012). The impact of use context on mobile payment acceptance: An empirical study in China. In *Advances in computer science and education* (pp. 293-299). Berlin: Springer.

Wu, J.H. & Wang, S.C. (2005). What drives mobile commerce? An empirical evaluation of the revised technology acceptance model. *Information & management*, 42(5), 719-729.

Xue, M., Hitt, L.M. & Chen, P.Y. (2011). Determinants and outcomes of internet banking adoption. *Management science*, 57(2), 291-307.

Yee-Loong Chong, A., Ooi, K.B., Lin, B. & Tan, B.I., (2010). Online banking adoption: an empirical analysis. *International Journal of bank marketing*, 28(4), 267-287.