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CONTENT

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INTERNATIONAL JOURNAL OF SOCIAL SCIENCES AND HUMANITY STUDIES
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HARNESSING HR GOVERNANCE IN EFFECTIVE VIRTUAL TEAMS

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–Abstract–

This paper reports on human resource governance (HRG) that was explored in an ethically cleared, qualitative case study on effective virtual teams in the software industry of South Africa. Embedded in corporate governance, human resource management (HRM) and general management; HRG is recognised as a control mechanism employed by management. People risks in the software industry are common, with technology cited as a contributing factor. A purposive sample was selected, while data were collected by means of an electronic questionnaire. The data were analysed by means of content analysis. Empirical evidence suggests that the traditional hierarchical role and purpose of a team leader and a team manager could be compromised in virtual teams; inflexible process management augments technology risks; and cross-country compliance with legislation contributes to greater knowledge creation. This study contributes to the emerging body of knowledge on the effective functioning of virtual teams and HR governance.

Key Words: Virtual teams; HR governance (HRG); high-performance work practices; flexible work practices; knowledge creation

JEL Classification: Business and Governance topics (general): Human Resource Management

1. INTRODUCTION AND BACKGROUND

The shift in focus from perception-based measures to fact-based approaches in dealing with poor governance in African governments and organisations has intensified since the dawn of the new millennium (Kakumba 2012; Olawuyi 2015; United Nations Economic Commission for Africa (ECA) 2016). This shift supports the notion that good governance is a prerequisite for Africa's structural transformation (ECA, 2016). The World Bank supports a systemic approach based on corporate governance (CG), indicating that a system of CG, where regulators,

owners and organisations are actively involved in directing and control, result in accountable, efficient and transparent organisations, which in turn builds trust and confidence (World Bank, 2016). Well-governed organisations carry lower risk, generate higher returns, decrease inefficiencies and minimise vulnerability. The International Labour Organization (ILO) extended the definition of CG by adding social responsibility in the international quest of realising the potential for fair and more inclusive globalisation with seamless markets. This social protection includes social justice; the redressing of social inequalities in marginalised groups (such as the youth and women); the extension of property and labour rights; decent work; and cross-border networking (ILO, 2018). Furthermore, the International Organization for Standardization (ISO) published the human resource governance (HRG) standard, ISO 30408 (ISO, 2016), which defines HRG and provides guidelines for its implementation. Internationally empirical research on HRG is scant (Kaehler, & Grundei, 2019). In South Africa, the few detailed empirical studies that have been conducted in this field focused primarily on conceptual papers (Meyer, Roodt, & Robbins, 2011) and HRG competency models (Schutte, Barkhuizen, & Van der Sluis, 2015).

Amplified by cross-border networking in the fourth industrial revolution (4IR) through technology, business model changes can be expected in all industries (Schwab, 2017). The 4IR is interacting with other socio-economic and demographic factors to create a perfect storm, resulting in major disruptions to labour markets and thereby necessitating governance leadership (World Economic Forum (WEF), 2016). It specifically necessitates people to work effectively in teams across geographical and time lines. This form of work has had profound implications for both job content and security, and ultimately for CG, in particular HRG (Horwitz, Bravington & Silvis 2006, p.472; Derven, 2016, p.1; Roehling, 2017, p.621). A critical global trend in strategic human resource management (SHRM), especially in emerging economies (e.g., South Africa) that are striving to become innovation based, is to design and implement HR systems that boost employee creativity within structures of sound governance (Liu, Gong, Zhou & Huang, 2017).

One form of cross-border networking in the workplace is virtual teaming. Virtual teams consist of geographically dispersed team members who use electronic-mediated communication systems. In contrast to typical face-to-face team (FTFT) membership or conventional team (CT) membership, virtual team membership is not always definable, or is limited at a particular point in time. Although the members share in the particular team function independently, the team has a shared purpose and strategy, which is known from the time a team member, joins

the team (Berry, 2011). Members could be individually as well as jointly responsible for the outcome reached during their membership in the team (Brown, Huettner & James-Tanny, 2007). In a virtual team, members are jointly accountable for managing relationships within the team. Although the role of the team leader might bear similarities to that of the FTFT manager, the dynamics of the position are different (Berry, 2011).

This article forms part of a greater study, the purpose of which was to explore best practices in effective virtual teams within the software section of the technology industry of South Africa. This particular article reports on the exploration of best practices for the functioning of those effective virtual teams and its implications for HRG. HRG is interwoven in the DNA of effective virtual teams. It encompasses the purpose, people, process and technology themes suggested by the framework of Ebrahim, Ahmed and Taha (2009) and De Bruyn (2015, p.775).

This article is structured as follows: firstly, the literature corpus on various elements related to HRG in virtual teams is presented. Next, HRG are empirically explored based on a qualitative, interpretative case study. Data were collected through an electronic questionnaire and analysed by means of content analysis. Finally, the findings and discussion of the information shared by the participants follow and some concluding thoughts are presented for implementation and further research.

2. LITERATURE REVIEW

2.1. Corporate governance vs HR governance

The conflict between adherence to the technical ISO standards and balancing the competing social interests of different stakeholders caused the ILO to terminate its 2013 agreement with ISO (ILO 2017). Despite this disagreement the majority of countries across the world (162) formally agree that corporate governance (CG) is a system of practices, rules and processes by which an organisation is directed and controlled (ISO, 2016). CG according to the ISO, essentially involves balancing the interests of an organisation's many current and future stakeholders in ensuring the long-term viability of the organisation and creating responsible, accountable, well-managed and value-focused organisations for strategic decision-making. One such a stakeholder is the multiple human resource actors. Countries (187) across the world formally agree to set labour standards, develop policies and devise programmes promoting decent work (ILO 2018). Nakpodia, Adegbite, Amaeshif, & Owolabi (2018) elucidate the ISO's definition by indicating that CG is split between rule-based and principle-based approaches to regulation in different

organisational contexts. This split is often informed by the types of institutional configurations, their strengths and the complementarities within them. Aguilera, Judge, & Terjesen (2018) highlight the centrality of an organisation's entrepreneurial identity as it interacts with the national governance log (as complied with by the ISO countries) to jointly create CG discretion within the organisation. They reveal that as an organisation's governance discretion increases, it will be more likely to adopt over- or underconforming governance practices that deviate from established norms and practices. This supports the ISO's claim that effective governance contributes to strategic decision-making by creating responsible, accountable, well-managed and value-focused organisations. As virtual teams work across geographical and time barriers, this ISO standards, forms the legal base for their functioning.

Previously, HRG was regarded as the product of the different forms of corporate CG (Konzelmann, Conway, Trenberth, & Wilkinson (2006). However, Kaehler, & Grundei (2019) states that HRG is the "internal and external behavioral framework for multiple actors' human resource management and its control in a corporation and its units, which consists of formalized norms and is itself the result of multiple stakeholders' constitutive influence." This definition is aligned with the ISO (2016) specifically notes that human governance refers to the system or systems by which people within an organisation are directed and held accountable, but doesn't address the conflict with social responsibility. To provide more certainty for compliance officers, the ISO standards in South Africa is implemented through the arrangements in the King IV Report on Corporate Governance for South Africa (King IV), (IODSA, 2015, Section 5) for the legal implementation of the ISO 38500 standard (known as the CG standard).

HRG forms one of the 13 national HR management standards at the SABPP. The SABPP is a professional HR body and quality assurance body for higher education learning provisioning and aligns itself with the ILO. Considering the association between ISO, KING IV and SABPP, which HRG principles influence virtual teams? The following voluntary audit principles and recommended practices, are forwarded by the King IV and SABPP to comply with technical ISO and ILO governance provisions:

2.2. Philosophy and operating principles for organisational leadership

King IV (IODSA, 2015, part 5.3) relies on effective and ethical leadership for good governance, and goes beyond the organisation to include society, the environment and the economy for current and future generations by acknowledging the inclusivity of its stakeholders (IODSA, 2017:20; 23). The

SABPP describes HRG as the minimum, functional risk-tolerance delegating authority, management, and autonomous teams an organisation can accommodate (SABPP, 2017, p.6). Aasi et al. (2018) warn that in cases where people work in network teams enabled by information and communications technology (ICT) (such as virtual teams), organisational culture influences information technology (IT) governance performance outcomes.

2.3. Performance strategy, monitoring and reporting

King IV (IODSA, 2015, part 5.2) suggests that management should assume responsibility for an organisation's strategy, purpose, risk and performance and their report should be accurate for those parties (stakeholders) assessing it. The SABPP applies this governance pillar and advises organisations to prepare a framework and metrics to evaluate and communicate the operational effectiveness, compliance and contribution to business success of various functions as part of good HRG (SABPP, 2017).

2.4. Governing structures, accountability and delegations

Governance is a major part of business and project management structure (Hamersly, & Land 2015), which may be typical of the working of virtual teams. King IV (IODSA, 2015, Part 5.3) suggests that management teams should have an appropriate balance of skilled, knowledgeable, experienced, diverse and independent members. According to the SABPP, HRG involves how teams are designed, the communication protocol, relationships and roles within the teams, their relationships with other stakeholders, as well as strategic, operational and functional accountabilities (SABPP, 2017). Hart (2017, p.1) observes that online communication methods expose organisations to security issues of their ICT systems, infrastructure and data. Virtual teams have very few constraints in respect of purpose, time or location to work with the ICT enabler. Although security measures are built into the ICT enabler, it is fundamental to ensure that the individual team members within the network are also subject to security measures. Country legal regulations may also have implications for the adoption, design, or functioning of virtual teams such laws relating to taxation, corporate governance, immigration, privacy and laws addressing how specific areas of work (Roehling, 2017). Derven (2016) notes that conflict may flare up in various ways such as personality issues, priorities, accountability, which compromise trust and processes in teams and support the ILO concerns over social concern in the implementation of ISO standards.

2.5. Core management activities

King IV (IODSA, 2015, part 5.4) suggests that CG in an organisation should deal with risks, including technology and information risks in functional areas, in a positive mode in order to support the organisation in reaching its strategic objectives. The SABPP applies that KING IV by identifying the functional areas of HRG as HR strategic development, business planning, oversight of rewards plans and programmes, HR resource allocation, HR staff development/leadership succession and the entrance and exit of team members. Through these core management activities, management sets direction and priorities, ensures effective execution over time and enforces internal controls (SABPP, 2017) and has a bearing on the social responsibilities of the organisation (ILO 2018).

2.6. Stakeholder relationships

The interests, needs and expectations of stakeholders should be management in the best interest of an organisation according to King IV (IODSA, 2015, part 5.5). Following from the theoretical overview, these features will now be empirically explored with respect to virtual teams.

3. RESEARCH METHODOLOGY

A qualitative research methodology, which is in line with the predominant research approach within the interpretivist philosophy, was used for data collection (Denzin, & Lincoln, 2018; Morse, & Richards, 2013).

3.1. Sampling procedure and data collection

The main study was preceded by a pilot exploratory study with a small group of participants in the software industry. The population, as defined by Salkind (2017), in this study comprised of all companies in the software sector of the technology industry of South Africa as listed on the Johannesburg Stock Exchange (JSE). To be practical and with due regard for time and budgetary constraints, a non-probability (purposive/judgement) sample was chosen based on the problem at hand (Salkind, 2017; Saunders, et al., 2016). This population and sample were considered the most appropriate for the purpose. Firstly, this industry and sector design software programmes, which enable virtual working, and, secondly, the teams working in the software departments themselves use the programmes they design to enable their virtual way of working.

In total, 16 companies, comprising 13 JSE-listed companies and the 3 most significant software role-players in the international software industry (Forbes 2018), were approached. No ideal sample size for studies using a qualitative

approach has been established, and only guidelines are available in respect of case studies. Myers, & Haase (1989) suggests that one case suffices, while Eisenhardt (1989) proposes that a sample should consist of between 4 and 10 cases. Denzin and Lincoln (2018) suggest six cases whilst Leech and Onwuegbuzie (2007) and Guest, Bunce and Johnson (2006) prefer between three and five cases. Therefore, although the population for this study comprised 16 technology companies, only 10 of them participated in the study, which was considered to meet the trustworthiness criteria for a qualitative case study. The total number of participants where 19. (Saunders, et al., 2016).

3.2. Instrument

Data were collected by means of an open-ended questionnaire according to a semi-structured data collection method. Qualitative content analysis was used (Salkind, 2017; Saunders, et al., 2016). Questionnaires are not uncommon as a method of data collection in qualitative research (Isenberg, Fisher, & Paul, 2012). To gain depth and insight into the experiences and views of virtual team members, guiding and probing questions were included to ensure the usefulness of the data collected (Isenberg, et al., 2012). Access to participating organisations was secured through consultation with gatekeepers, namely, the HR practitioners in the selected organisations (Kreitner, & Kinicki, 2008).

The questionnaire was self-administered and in electronic format, using the LimeSurvey 2.0+ tool (LimeSurvey). Thus, the data collection method simulated the virtual teams' operating method, namely, virtuality. The questionnaire was available via a Web link to the HR gatekeeper in the participating organisations. Participants completed the questionnaire in their own time (allowing for time zone barriers) using electronic devices. LimeSurvey 2.0+ allowed the researcher to design the questionnaire and to capture the data electronically. LimeSurvey has basic data analysis capabilities (Salkind, 2017).

3.3. Strategies to ensure trustworthiness

To ensure the scientific value of the empirical qualitative study, the researcher endeavoured to follow the guidelines proposed by Marshall and Rossman (2016) and Morse, & Richards (2013). To achieve credibility, the researcher obtained prolonged engagement with the identified organisations by way of the assigned HR gatekeepers. Further, a pilot study of the questionnaire was conducted before the empirical study was conducted. The information of both the pilot study and the empirical research was verified by the researcher and the assigned university support staff. A field journal was kept, and experiences during the research

process were captured to increase reflexivity. The researcher obtained structural coherence of the data by utilising the themes and aligning the categories of the questions with the research method. Member checking of this research occurred at two international conferences to establish whether any important aspect in either theory or application had been missed and whether the study was "fit for purpose". No misfit was found. A three-tier triangulation process, was utilised to ensure the credibility of the study. Multiple theories were utilised to phrase the research questions. Data were cross-examined by three parties and deemed an accurate reflection of the information presented by the participants. Triangulation of information was obtained by utilising the principle of following more than one theory and source of data, and referential adequacy was achieved by citing the authors in the adapted conceptual framework (Guba, & Lincoln, 2012). Referential adequacy was achieved in that all research utilised to draft questions, is cited in the study and noted in the bibliography of the study. The dependability of this research was ensured since an audit trail of the process, the coding procedures and the responses of each participant is available for audit purposes on LimeSurvey 2.0+. However, in the interest of ethicality, the audit trail cannot be published in this article. Further, an Excel spreadsheet was used to download the information through an institutional software technician, and confirmation is available on request. Coding of question groups and questions was created automatically and electronically via the LimeSurvey 2.0+ electronic questionnaire data collection instrument. Reasonable precautions were taken to ensure the authenticity of the voices of all respondents and companies who participated in this empirical study, and the original response document was verified by the researcher. The coding system that the researcher employed to link unique participants to a specific organisation, together with the industry's risk alert to secure usernames and passwords for participants' email accounts, may be considered to have contributed towards to the non-occurrence of duplicate participants. Ethical considerations, as suggested by Saunders, et al., (2016), were adhered to.

4. FINDINGS, ANALYSIS AND DISCUSSION

Interpretive philosophy seeks to produce descriptive analysis that emphasises understanding of the phenomenon studied, rather than a search for broadly applicable laws (Denzin, & Lincoln, 2018; Saunders, et al., 2016). An interpretivist research philosophy holds that knowledge is created (Seymore, 2012). A qualitative content analysis protocol was utilised to formulate the questions rooted in theory, as well as to code, categorise and thematically analyse and interpret the data obtained from the participants (Morse, & Richards, 2013).

Following the completion of the questionnaire, the data presented by the participants were downloaded to an Excel spreadsheet. An overall impression of the data was obtained before each analysis. The descriptions of the participants' perceptions and experiences of best practices in virtual teams provided data, which formed the basis of themes regarding variables affecting best practices in the effective functioning of virtual teams in the software sector of the technology industry in South Africa. The themes could be generalised to an international audience and diverse industries, rather than generalising laws from sample to population. The findings and analysis of the empirical study indicated that significant factors contributed towards the focus of the purpose theme and specifically strategy setting in virtual teams. Regarding human governance, the four ISO pillars will now be discussed.

4.1. Philosophy and operating principles for organisational leadership

Finding and analysis

As regards the issue of effective practices regarding the establishment of the purpose of a virtual team, participants selected a number of best practices as the top practices needed to establish purpose in a virtual team. One participant maintained that the purpose of a virtual team is best described as a written, specific, quantifiable goal, and that purpose establishment at the entrance of new members to the team, where the roles, rights, privileges and accountability of the team is established, is also important. A third of the participants selected as a best practice that a virtual team align its direction, purpose, resources (people) and design with that of the organisation. These participants also noted that purpose in virtual teams is best described as a clear, quantifiable direction, and the successful handover of projects serves as evidence that a virtual team has effectively achieved its purpose.

Interpretation

This response is in alignment with the King IV requirements in that good governance relies on integrity, competence, responsibility, accountability, positive outcomes and a result-orientated focus.

Finding and analysis

On the question of the best practices to deal with governance in the facilitation of a virtual team, the participants made a number of suggestions. The foremost of these suggestions was to have a hierarchically and organisationally assigned individual who creates a culture in the team. Other suggestions were to assign a

particular hierarchical and organisational responsibility to a dedicated individual in the team; that the team leader should understand the personal circumstances of each team member; that the team leader should be able to choose and use unique team-embedded processes; and that there should be techniques and procedures for dealing with discipline. However, technical expertise at any point in the team's tenure dictate team actual leadership in the team.

Interpretation

Effective virtual teaming relates to the extent to which human beings collaborate to ensure a sustainable and growing business function. Segal-Horn and Dean (2009, p.41-50, adapted by this researcher) suggest a flexible, multidimensional approach to encourage greater flexibility and constant learning in contributing towards a company's competitive edge and sustainability. This empirical study clarifies the essential elements by which virtual team members would know whether the team is effective and governance aware. These elements include qualified, technologically skilled and knowledgeable team members, in line with the findings of Daniel, Agarwal, & Stewart, (2013, p. 312-333). Further, actual and explicit measurements, inclusive of financial measurements (financial targets are being met, meaning each member is delivering his/her part), a dislike of mediocrity (quality of output) and an impetus towards innovation, real change and excellence in accomplishment suggest a higher level of expectation of effectiveness, to which participants subscribe. It is significant that although individuals contribute through their efforts, the whole team's performance carries greater value. Subjective input suggests an acceptance of logical contributions to enhance the end result. The regular use of "*we" (participants (25, 28, 35 and 37)* by participants supports the notion that virtual team effectiveness encompasses team effort, where each individual effort contributes towards the greater yield *(27 and 37)*. ISO (2016) specifically notes that human governance refers to the system or systems by which people within an organisation are directed and held accountable.

4.2. Core management activities

Finding and analysis

Mitigating risk in order to reach a virtual team's strategic objectives requires processes to address the various functional areas of possible HRG risk. The areas include strategic development, business planning, oversight of rewards plans and programmes, HR resource allocation, HR staff development/leadership succession, and the entrance and exit of team members. Only one virtual team member (a team manager) *(13) responded to the question:* "What are the process

practices important for virtual team facilitation to function most effectively?" The general absence of team members responding to the question indicates either a disinterest in or non-prominent notion of team facilitation in the different teams.

Interpretation

Virtual team members connect with a network of educated, specialist and committed people. From earlier purpose questions (available on request), it was inferred that virtual team members have a strong desire to increase their knowledge. Working in a team set-up with people they admire and respect for their knowledge and skills, team members are prepared to learn from those individuals. This culture of sharing knowledge can only take place in a trusting relationship if all parties aspire to achieve the same goal. Trust suggests a healthy familiarity with one another and a realisation that all parties can be depended upon. It makes sense that when a virtual team is confronted with an issue, and an expert on that issue is present in the team, the members' natural behaviour will be to consent to that person facilitating the team efforts for the particular expertise needed. This could lead to conflict between the expert and the hierarchically assigned team manager if the process is not managed well. From time to time, it may transpire that the hierarchical manager must step down and allow the expert to adapt to the leadership role. When this happens, good relationships between the expert as team facilitator and the team members would serve the expert well. It will be easier to assign work and to manage performance for the period in which the expert is the team facilitator if everyone in the team knows about one another's personal circumstances and expertise. The absence of responses of many participants suggested to the researcher that this is either such a regular phenomenon that it does not need elaboration or that a process does not exist. This response concurs with similar responses in the rest of the study.

4.3. Stakeholder relationships

Finding and analysis

Since virtual teams work towards a specific goal, the participants were asked how they would know if a team was functioning effectively in the best interest of the organisation and its stakeholders (IODSA, 2015, part 5.5). A total of 19 participants responded to this question in the questionnaire; 13 gave full responses and 5 moved to the next question without giving a response. The axial code revealed that participants measure their shareholder relationship through the various materialisations of objectives such explicit objectives *(5, 32 and 40)*; innovation *(12 and 13)*; excellence *(12 and 32)*; revenue *(13 and 27)*; real change

(25 and 32); accomplished (*5, 30, 40 and 43)*; effort *(25, 27 and 43)*; continuous measurement *(25, 35 and 37)*; inclusion of subjective input *(28 and 37)*; individual contribution *(27 and 37)*; and team contribution *(25, 28, 35 and 37)*.

Interpretation

Effective virtual teaming relates to the extent to which human beings collaborate to ensure a sustainable and growing business function. Segal-Horn and Dean (2009), adapted by this researcher) suggest a flexible, multidimensional approach to encourage greater flexibility and constant learning in contributing towards a company's competitive edge and sustainability. This empirical study clarifies the essential elements by which virtual team members would know whether the team is effective and governed well. These elements include qualified, technologically skilled and knowledgeable team members, in line with the findings of Daniel, et al., (2013)). Further, actual and explicit measurements, inclusive of financial measurements (financial targets are being met, meaning each member is delivering his/her part), a dislike of mediocrity (quality of output) and an impetus towards innovation, real change and excellence in accomplishment suggest a higher level of expectation of effectiveness, to which participants subscribe. It is significant that although individuals contribute through their efforts, the whole team's performance carries greater value. Subjective input suggests an acceptance of logical contributions to enhance the end result. The regular use of "*we" (25, 28, 35 and 37)* by participants supports the notion that virtual team effectiveness encompasses team effort, where each individual effort contributes towards the greater yield *(27 and 37)*.

5. CONCLUSION AND RECOMMENDATIONS

The main aim of the chief study on which this article reported was to explore best practices in effective virtual teams. Relevant literature, inclusive of scholarly articles and books, was studied to elucidate definitions and practices. Although all these sources provided valuable information, the members of virtual teams who participated in the empirical study and who were prepared to share their experiences were the source that produced the best insight into HRG establishment. These members of virtual teams highlighted the peculiarities that differentiate a virtual team from an FTFT, such as that the traditional hierarchical role and purpose of a team leader and a team manager may be compromised in a virtual team as team facilitation changes within the tenure of the team and is based on specialised skills and knowledge. Human networking to obtain talented and scarce human resources (such as experts in virtual teams) is regarded as the preferred sustainable method of talent management in the industry in question to

ensure that likeminded individuals serve on virtual team.

The article sets out issues that may need to be considered and proposes a recommendation of research on HRG in virtual teams. The main finding of this study for HR practitioners is that attention should be given to *professional behaviour and leadership* (consisting of the factors *leadership and personal credibility*, *solution creation*, *interpersonal communication* and *innovation*), *service orientation and execution* (consisting of the factors *talent management*, *HR risk*, *HR metrics* and *HR service delivery*) and *business intelligence* (consisting of the factors *strategic contribution*, *HR business knowledge*, *HR business acumen* and *HR technology*).

The main findings of this study for virtual team members are that not every person would serve well on a virtual team and that an orientation towards good governance, which involves integrity, competence, responsibility, accountability, positive outcomes and a result orientation – both from an autonomous perspective and within a group – is a crucial attribute. The main findings of this study for virtual team leadership are that they should have an understanding of the differentiation between the facilitation of teamwork and the duties of the hierarchical positions since they may be differentiated at any time in virtual teams. From a theoretical perspective, this research makes an important contribution towards knowledge on the importance of HRG in virtual teams in organisations within the technology industry of South Africa. This research further confirms the credibility of the HRG practices that can be applied in the multicultural South African setting. Finally, this research presents an HRM measure of competence that can be used to detect the levels of competence of HRM practitioners in South African organisations, in order to take corrective measures where necessary.

This research has certain limitations. Firstly, limited empirical research exists on the application of HRG in South African workplaces, making interpretation of the results difficult. Secondly, this research was conducted in the South African context only and by means of a qualitative approach, which means that the results cannot be generalised to other countries and settings; only the themes and the questionnaire on the themes may therefore be duplicated. There is currently limited insight into HRG, and this research adds to this insight. For future research, it is recommended that this research be expanded to other countries, especially African countries, and other industries. It is proposed that HRG in various other contexts and comparative geographies be explored. Further, it is proposed that distinct links between global corporate citizenship, risk and HRG

within virtual teams and FTFTs be investigated globally, but particularly within an African setting. Lastly, it is recommended that the following items on the research agenda for virtual team on the topic of HRG be investigated: the influence of the sociotechnical nature of digital platforms. The type of team, organisational and country specific contexts may provide comparative insigths into HRG across the world and evaluation of talent management practices in compliance with HRG.

In conclusion, this research provides insight into best practices regarding HRG in the functioning of effective virtual teams in organisations within the technology industry of South Africa. Moreover, the results of this research show that HRG should be made more visible to the various stakeholders within in the workplace in order to enhance their value-adding and strategic contribution to South African organisations.

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THE EFFECT OF PUBLIC PROCUREMENT ON THE FUNCTIONING OF A NATIONAL EVALUATION SYSTEM: THE CASE OF SOUTH AFRICA

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─Abstract─

The practice of evaluation is gaining importance across governments in Africa. Country-driven evaluation should enhance the government's capacity for accountability, knowledge management, performance, as well as improved decision making. Countries that have implemented national evaluation systems include Benin, Uganda, and South Africa. Emerging research tends to focus on methodologies or sector-specific aspects of evaluation. This article examines the specific challenge of public procurement for conducting evaluations as knowledge-based services. The article is based on a baseline study. The methodology for the study involved a literature review; in-depth interviews; focus groups with government officials, evaluation suppliers, trainers, and non-governmental organisations (NGOs); a root-cause analysis workshop; and an online survey with both clients and suppliers. The findings are that the quality of government procurement and supply chain management is a major factor that affects the supply of evaluators. The article concludes by offering recommendations to enhance the process of public procurement.

Key Words: monitoring and evaluation, public procurement, supply chain management, national evaluation system, South Africa

JEL Classification: H057

1. INTRODUCTION

Country-driven evaluation of service delivery is gaining traction in Africa through the establishment of a National Evaluation System (NES). It is anticipated that increasing state-led evaluation will lead to improvements in government performance, decision-making processes, knowledge management, and accountability. Furthermore, the adoption of an NES follows an international trend that has seen the practice of evaluation developing on the continent through both donor-driven initiatives, as well as through state-led evaluation (European Commission, 2014; Genesis Analytics, 2017).

Countries that have implemented their own NES include Benin, Uganda, and South Africa (Goldman et al., 2018; Twende Mbele, 2018a, 2018b). In South Africa, the NES was institutionalised in 2011 through Cabinet's approval of the National Evaluation Policy Framework (The Presidency, 2011). The national Department of Planning, Monitoring and Evaluation (DPME) in the Presidency oversees the evaluation function for the government. Goldman et al. (2018) found that although South Africa's NES is in its infancy, great strides have been made. A national evaluation policy and national and provincial evaluation plans are in place, and departmental evaluation plans have recently started to be put in place. Evaluations in the national evaluation plan are being presented to Cabinet, and improvement plans are being implemented based on the results of many of the evaluations.

In terms of the number of evaluations that have been conducted at the departmental, provincial, and national levels of government, Twende Mbele (2018b:11) confirms this trajectory by identifying a cumulative total of 570 evaluations from the period 2012/2013 to 2019/2020 that have either been completed or are under way. In addition, there has been a large recent increase in planned departmental evaluations and government demand for evaluations might double or triple in the next three years, from approximately 40 per annum to approximately 80 to 120 per annum (Twende Mbele, 2018b).

South Africa's National Evaluation Policy Framework is premised on the principle of independent evaluations funded by the government. This results in the government's supply chain management and procurement policies and processes playing a key role in the functioning of the evaluation system because external service providers must be appointed to conduct evaluations. It also means that the

success of South Africa's NES depends in part on an adequate supply of independent evaluators being available to respond to the government's tenders for evaluations.

Research on public procurement tends to focus on aligning strategic government goals and creating efficiencies for the government (McCrudden, 2004; McCue, Prier & Swanson, 2015). In Africa, research ranges from issues related to specific sectors as in the case of Nigeria's infrastructure sector (Manu et al., 2018) or the overall government experience of procurement (Ambaw & Telgen, 2017; Toeba, 2018).

Public procurement has three strategic goals, namely regulatory, commercial, and socioeconomic goals (Erridge & Mcllorey, 2002, cited in Glas, Schaupp & Essig, 2017:573). Worrel (2012:135) asserts that procurement is done to meet the internal goals and needs of government institutions, as well as to achieve external goals, namely economic development; economic equity, and environmental sustainability. These external goals could also include socioeconomic targets "such as SME [small and medium enterprise] support or procurement of new and innovative … services to satisfy anticipated government needs" (Glas et al., 2017:582). What is important here is the understanding that these contrasting ideals call for the public officials who manage procurement to balance these different priorities, as well as to manage possible conflicts that may arise during procurement (Glas et al., 2017:573).

Procuring knowledge-based services presents a particular challenge for government officials, as well as for service providers, because of the intangible nature of knowledge production and management. Hawkins, Nissen and Rendon (2014:224) argue that knowledge-based services should be strategically sourced because such services are "heavily dependent on skills, experience, and capabilities of individuals". Service providers of evaluations are thus deemed to be knowledge workers who should work with government officials to generate information needed to improve service delivery. It should also be noted that the particular expertise that these service providers bring "makes switching suppliers quite costly and renders frequent competition quite counterproductive" (Hawkins et al., 2014:24).

South Africa has adopted a comprehensive legal framework for public sector procurement. Notable is the constitutional provision for a public procurement system that is fair, equitable, transparent, competitive, and cost effective

(Republic of South Africa [RSA], 1996: Clause 217). The Preferential Procurement Act of 2000 (RSA, 2000) and its associated regulations (RSA, 2017), read together with the legal provisions for broad-based black economic empowerment (B-BBEE) (RSA, 2003) are aimed at achieving this constitutional provision and achieving the balance of procurement priorities discussed above. The electronic Central Supplier Database for the government's service providers offers an innovative opportunity to streamline public procurement across government departments and entities (Anthony, 2018).

Notwithstanding these legal provisions, Ambe and Badenhorst-Weiss (2012:249-250) and Naudé, Ambe and Kling (2013) argue that there are still numerous procurement challenges facing the South African public sector, including a lack of proper skills and management, non-compliance with supply chain management policy and regulations, inadequate planning and linking of demand to the budget, a lack of accountability, and fraud and corruption.

This article focuses on specific challenges related to the procurement of evaluations as identified in the 2018 Twende Mbele diagnostic studies on the supply and demand for evaluators in South Africa. (Twende Mbele is a non-governmental organisation [NGO] that aims to promote collaborative learning regarding monitoring and evaluation in African countries, starting with a partnership between South Africa, Uganda and Benin.) The diagnostic research followed a series of studies on the practice of evaluations carried out in Benin, Uganda, Ethiopia, Ghana, and Malawi (Twende Mbele, 2018a, 2018b; Centre for Learning on Evaluation and Results Anglophone Africa, 2013a, 2013b, 2013c). The Twende Mbele research aimed to quantify the supply and demand for evaluators in South Africa to identify the factors that affect supply, and to make recommendations regarding the strengthening of supply. The studies found that weaknesses in the government's procurement and supply chain management processes are often the root cause of problems with the quality of evaluations and apparent shortage of supply of evaluators. This article discusses these weaknesses, considering the proposition that strategic sourcing is needed in procuring knowledge-based services, as proposed by Hawkins et al. (2014).

1.1. Methodology

The purpose of this article is to explore the impact that public procurement has on the sourcing of knowledge-based services for government evaluations in South Africa. The main research question of this article is: What impact does the process

of procuring evaluations as knowledge-based products within the context of public procurement in South Africa have on the availability of evaluators?

A constructive qualitative paradigm was used to analyse data that were drawn from the 2018 Twende Mbele diagnostic studies. This study was based on a literature review; interviews; focus groups with government officials, evaluation suppliers, trainers, and NGOs (including a root-cause analysis workshop); and an online survey with both clients and suppliers. Twenty-three interviews were held with a range of clients, suppliers, and institutions that provide training in evaluation. After 11 interviews with suppliers, the point was reached where there were diminishing returns from conducting further interviews, because few new issues were being raised. Forty-four responses were received from the online survey, which was aimed at four target groups, i.e. individual evaluators, organisations that conduct evaluations, organisations that could potentially conduct evaluations on the supply side, and client bodies that commission evaluations on the demand side. Many of the issues that were raised by the interviewees were also raised by the respondents to the online survey. Due to the limited number of suppliers and clients sampled compared to the total population, the findings of this study cannot be generalised. Nevertheless, the interviews and online survey enabled some qualitative issues to be identified and provided some useful insights into the research questions.

The rest of this article is divided into four sections. The first section examines the theoretical considerations for public procurement for evaluation. This is followed by the legislative framework for public procurement in South Africa, outlining the DPME's procurement experience in particular. Next, the findings from the 2018 diagnostic studies are analysed, and recommendations are made in the conclusion.

2. EVALUATION AND PROCUREMENT

2.1. Evaluation capacity building

As pointed out by the Organisation for Economic Co-operation and Development (OECD, 2010), strengthening evaluation capacities involves more than just building individual technical skills; capacities also involve institutional or organisational capacities and creating an enabling environment. This means that an assessment of demand and supply for evaluation must be done in the context of the enabling environment for supply and the organisational capacity of the demand (organisations) to create an appropriate enabling environment for supply.

In 2014, the World Bank conducted a study of evaluation service providers for the DPME (World Bank, 2014). The eight suppliers interviewed by the World Bank had many positive things to say about their experience of evaluations managed by the DPME, but also raised a number of concerns related to the procurement process and how evaluations are managed by the government. These concerns point to weaknesses in the organisational capacity of the government to create an appropriate enabling environment for supply. The World Bank (2014) study concluded that "[t]he evaluation supply side has the potential to grow, based on the existing firms, market projections and potential, to meet international standards and to become a relevant export services market … Government, and DPME, has a great responsibility in how the evaluation supply side will grow".

2.2. Procurement as part of the context of evaluation

Coldwell (2019) argues for the interrogation of context in evaluation. Context comprises a myriad of features that, when explored, may contribute to "understanding the reason behind a programme's success or failure" (Coldwell, 2019:113). Six underlying features of context are proposed: dynamic factors that may change shape over the course of evaluation; agentic factors are independent and may lead or contribute to change; relational factors may influence elements of change processes of evaluation; inherent factors may work alongside others to inform decisions; historically located factors should be viewed in terms of long-term change processes; and complex contextual factors may affect evaluations due to their complexity (Coldwell, 2019:111). These contextual features acknowledge that evaluators should take cognisance that evaluations are conducted in an environment that is dynamic, agentic, relational, historically located, and particularly complex.

This can be said of the evaluations conducted for the DPME on behalf of the South African government. Public procurement as part of this context for evaluation bears the features of a complex contextual factor. Given that the government is part of a local, regional, and international community that is both a consumer of government services and a provider of goods and services – each with competing social, economic, and political developmental goals – procuring evaluation thus occurs in a context that mirrors the country's socioeconomic developmental aspirations. These aspirations can be evidenced in a public procurement framework that aspires to economic equity, fairness, and transparency, as well as to meet internal needs for the DPME. McCruden (2004) confirms this multipronged nature when assessing social outcomes for labour

practices and for gender parity in public procurement in Malaysia, the United States of America, and South Africa, which all adopted policies for affirmative action and preferential procurement.

McCue et al. (2015) present procurement dilemmas that face public procurement officials, which include devolving purchasing responsibility and developing flexible procurement systems while maintaining accountability and control. In these instances, public procurement is required to reflect "high levels of public disclosure", as well as a "high reliance on the bid process to increase transparency" (McCue: 2015: 197). This in turn calls for a delicate balance to be sought between efficiency and oversight in public procurement. McCue et al. (2015: 199) found that trade-offs are sought to provide more flexible procurement processes and flexibility to line managers in the purchase of goods and services.

Glas et al. (2017) determine that different levels of government have distinct views on strategic goals whereby centralised procurement organisations perceive political goals as paramount and are influenced by strategic objectives such as innovation, transparency, the promotion of competition, and social responsibility. Decentralised procurement agencies, on the other hand, value non-political goals such as cost efficiency. It is also important that the procurement of service providers of evaluations be done strategically to ensure that evaluations are viewed and utilised as a knowledge management service (Hawkins et al., 2014).

2.3. Governance framework for public procurement in South Africa

The South African Constitution stipulates that public procurement should be fair, equitable, transparent, competitive, and cost effective. The Public Finance Management Act of 1999 and the Preferential Procurement Policy Framework Act (PPPFA) of 2000, together with their respective regulations and a range of Treasury instructions and practice notes, provide a framework that aims to achieve these constitutional requirements. The PPPFA draws on the provisions of the B-BBEE Act of 2003 and its corresponding codes for the calculation of suppliers' B-BBEE status.

2.4. DPME procurement of evaluations

Evaluations comprise a significant portion of the DPME's annual expenditure, as reflected in Table 1. From 2014/2015 to 2017/2018, evaluations made up more than a third of the total expenditure on goods and services for this department, reaching as high as 44% in 2017/2018. Going forward, although the estimates for

the medium term (2018/2019 to 2020/2021) reflect a reduction in this procurement item, it is expected to remain at at least 20% of the total expenditure.

Table 1: Expenditure trends for procuring suppliers for the DPME

Audited outcome Amount in R (thousands)				**Adjusted appropriation**	**Medium-term expenditure estimate**		
Financial year	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Consultants: Business and advisory services	52 545	51 168	61 591	91 735	36 379	35 195	38 717
% of total goods and services expenditure	37%	35%	37%	44%	22%	20%	21%
Total goods and services expenditure	**139 440**	**148 054**	**165 428**	**208 370**	**158 189**	**168 193**	**177 816**

Source: Adapted from National Treasury (2018:147)

3. FINDINGS FROM THE TWENDE MBELE STUDIES

3.1. Supply of evaluators

It was not possible to quantitatively establish the size of the current country supply of evaluation consultants because there is no clear definition of what an "evaluation consultant" is. There is a debate in South Africa as to whether evaluation specialists, or sector specialists with some evaluation training, or both, are required to conduct evaluations. The size of the potential supply market will vary depending on how an evaluation consultant is defined. Some evaluation consultants are self-taught in evaluation. In addition, many consultants who conduct evaluations also do other research and consulting work. Some conduct evaluations frequently, others only occasionally. Some of those conducting evaluations occasionally might conduct more evaluations under certain circumstances, others might not.

Most of the suppliers interviewed indicated that their preference was to employ evaluators with sector expertise and experience who have learned evaluation methods, as opposed to employing evaluators who have specialised in evaluation but have limited sector expertise or experience. Many suppliers do not employ permanent evaluation staff – rather, they form evaluation-specific associations with individuals with the required qualifications, expertise, and experience. There is therefore a pool of people, some evaluation specialists, some sector specialists, who can be drawn on by evaluation consultancies. Many of these people work for a range of different evaluation consultancies. Many of them also have other non-

evaluation work. The size of this pool depends partly on the eligibility requirements for the evaluations.

Some suppliers or potential suppliers can choose whether to conduct evaluations for certain clients or not, as they have other options for earning an income. Their availability to conduct evaluations often depends on factors such as who the client is, the track record of the client in terms of the way in which it manages evaluations, the quality of the terms of reference, and whether the budget is realistic.

Historically, the supply market in South Africa has met the government's demand for evaluation. Officials in the DPME indicate that they have not had to cancel any requests for proposals (RFPs) due to a lack of response from the market (although occasionally RFPs have had to be re-issued because the quality of the responses was poor). There is only one reference in one of the provincial evaluation plans to a cancellation of an RFP due to no responses being received. The study noted, however, that while supply has been meeting government demand to date, it may not be able to meet government demand that may grow two or three times larger within the next three years.

3.2. Challenges with the demand-side management of evaluations

During the interviews and workshops and through the online survey, suppliers identified a range of challenges that they experienced when conducting evaluations for government clients. Many of these challenges were also identified by suppliers in interviews conducted for the World Bank (2014) study mentioned earlier. The challenges identified by the suppliers include the following:

- Terms of reference for evaluations are unclear or unrealistic, contain excessive over-specification, stipulate impossible timeframes for submission of bids and for conducting evaluations, and contain inconsistent eligibility and evaluation criteria.
- The scope of work required is underestimated by the client, there are changes to the scope after awarding the tender, and clients ringfence the scope to create no-go areas of underperformance or to avoid placing a decision maker in a poor light.
- Tenders are issued for the evaluation of programmes without clear theories of change, and it is not possible to retrofit theories of change due to a lack of consensus among stakeholders, which are therefore unevaluable.

- Clients not paying for deliverables timeously and long delays in obtaining approvals for evaluation deliverables and subsequent delays in payment.
- Long procurement processes, resulting in it being difficult to retain the team for months between the time of the tender and the time of award (suppliers usually assemble a team, including associates as opposed to full-time employees).
- Suppliers are summoned to interviews without checking their availability, and bidders often find it difficult to make their key people available on the date of the interview arbitrarily set by the government.
- Micro-management, chaotic management, and/or ill-informed management of the evaluation by the client; adversarial, autocratic, and prescriptive management style of some government clients; inability of the client to manage stakeholders during the evaluation; and having to work under evaluation steering committees "with a lot of people who don't know what they are doing".
- Difficulty gaining access to data from the government in order to perform an evaluation.
- No feedback on reasons for not being successful in tenders (several respondents had become despondent in this regard and indicated that they were no longer tendering because they did not know why they were always unsuccessful).
- Evaluations being conducted for compliance purposes (after appointment, the client is "out for lunch" and not available to engage in the evaluation), and less enthusiasm for the evaluation in the line department than in the DPME.

None of the above challenges are caused by problems with the regulatory framework for procurement and supply chain management in South Africa *per se*; they are rather caused by poor implementation within the framework.

Some suppliers indicated that they had incurred losses on government evaluations, largely due to the challenges listed above. Several suppliers indicated that they preferred to conduct evaluations for foundations, "non-profits", and multi-lateral institutions rather than for the government because they are better managed by the client and are less likely to be loss-making. One supplier indicated that *"government evaluations always go over time and budget"*, due to the complexity of government systems, the large number of stakeholders, and due to the government often being unable to manage stakeholders and scope.

Some suppliers were of the view that the projected increase in evaluation demand from the government is not sufficiently convincing for them to invest in additional capacity to meet the demand. Reasons given for this view included that only a small proportion of the evaluations in the provincial and departmental evaluation plans are actually implemented, that the evaluation projects are often very small, and that the quality of the government procurement process is often very poor.

Some suppliers indicated that, although they had conducted evaluations for the DPME in the past, they have taken a decision to no longer do so due to past negative experiences. One supplier stated: *"With the exception of only one provincial government, I have found all evaluation project management to be considerably lacking. There is a total failure to stick to turnaround time commitments on the part of clients. In many instances shallow, contradictory or vaguely related comment follows and the substance of the evaluation is missed. My personal frustration is to receive comments originating from positions of power over the evaluator, where we are treated as 'consultants' in the most derogatory sense and we are expected to answer, 'how high' when the client says 'jump'."* Another stated: *"I am able to choose my clients carefully. If they value evaluation feedback, do not complicate the evaluation processes unnecessarily and meet their payment obligations as per contract, I'm keen to work with them. Government, however, falls short on all three of these criteria so I choose not to work with them."* One supplier indicated that *"there is no shortage of evaluation firms, only a shortage of firms willing to work for government".*

Nevertheless, some suppliers indicated that, notwithstanding all the challenges related to government clients, they would continue to bid for government evaluations. Some of the suppliers indicated that their reasons for continuing to tender for government evaluations, even though they are not profitable, are that they are important for exposure, that they are core to their purpose as evaluation organisations, and that they help them to engage with and understand the public sector.

The client respondents to the online survey generally had similar minimum qualification or experience requirements for their evaluation tenders, with a requirement of a minimum of 10 years of sector experience being common. There were, however, differences in the details of the requirements. Eleven DPME terms of reference for evaluations were reviewed and it was found that they all differed to some extent in terms of the tender evaluation criteria, particularly regarding the experience and qualification requirements and how these are evaluated. The lack

of standardisation of these processes and procedures makes it difficult for suppliers to know exactly what they need to put in place to stand a good chance of winning tenders. It also creates perceptions of a lack of consistency and transparency in the tendering process. These factors all reduce the attractiveness of the evaluation market to potential suppliers. In addition, it makes the adjudication of tenders more difficult if the tender evaluation criteria and methodology are not constant.

The study found that emerging consulting firms that conduct evaluations are subjected to the same demand-side weaknesses as more established firms, but the emerging firms are more negatively impacted by these weaknesses than the established firms. For example, emerging firms are more negatively impacted by delays in payment or by long delays between the time of bidding and the time of award. Thus, although South Africa has put in place a regulatory framework for public procurement that balances the constitutional requirements for both equity and cost effectiveness, this study found that weaknesses in the implementation of this framework can undermine the achievement of the equity objective.

The relationship between government clients and suppliers contrasts with that between private foundations and suppliers, which was reported by some of the suppliers to be a more collaborative relationship. Some suppliers indicated that private foundations are more attractive clients for this reason. Collaborative relationships between clients and suppliers imply a degree of deliberate "co-production" of evaluations. Some suppliers indicated that they had been involved in collaborative evaluations with non-government clients that involved working together throughout the evaluation process, including a joint definition of the scope of the evaluation.

4. CONCLUSION

A key finding from the study is that problems with the quality of demand-side management of evaluations are often the root cause of problems with the quality of evaluations and apparent shortage of the supply of evaluators. The quality of supply is, to a large extent, dependent on the quality of commissioning (or procurement) and the management of evaluations by clients. Government clients might increasingly experience an apparent lack of supply of evaluators that is due to suppliers choosing not to work for them, rather than being due to a real shortage of supply. If the government wants to act to reduce the risk of a shortage of supply of evaluators in the future, it should focus primarily on addressing the

demand-side shortcomings identified in this study. It should put in place a more appropriate procurement strategy for evaluation, standardise the experience and qualification requirements in requests for quotations and tenders and the method of evaluating them, standardise as many other parts of the evaluation process as possible, introduce evaluability assessments as a standard part of the evaluation process, and train government evaluation managers.

As mentioned in the introduction, Hawkins et al. (2014:224) argue that knowledge-based services should be strategically sourced because such services are "heavily dependent on skills, experience, and capabilities of individuals". Service providers of evaluations are knowledge workers who should work with government officials to generate information needed that can inform and improve service delivery.

A more appropriate procurement strategy would consider packaging evaluations and/or putting in place term contracts or framework contracts for evaluations.

The study notes that this is allowable in terms of the existing South African regulatory frameworks for procurement, which encourages strategic sourcing (RSA, 2000; 2003; 2017). Packaging or term contracts would result in larger-value tenders that would attract more established private sector management consulting companies to participate in the evaluation market. Requirements for sub-contracting to smaller suppliers and/or supplier development could be built into the contract documents for the packages of evaluations. In addition to creating opportunities for sustainable supplier development, other potential advantages of packaging evaluations are that it reduces the tendering workload for the government and the bidding workload for suppliers and that it provides more opportunities for the development of collaborative relationships between clients and suppliers over time. The study notes that some of the donor organisations are now issuing framework contracts for evaluations. One of the donors indicated that they had been through processes of strategic "commercial reviews", which had resulted in better procurement of evaluations. It is recommended that the South African government requests their advice and assistance in taking a more efficient and strategic approach to evaluation procurement.

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ANALYSIS OF THE NON-LINEAR EFFECT OF PETROL PRICE CHANGES ON INFLATION IN SOUTH AFRICA

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─Abstract─

In the South African economy, the phenomenon of high levels of inflation coupled with low levels of economic growth has been experienced over the last decade. In addition to this, the relatively high levels of inflation could be related to rising costs (cost-push inflation) rather than consumer demand (demand-push inflation). One of the factors that contributes to costs and rising inflation in South Africa is fuel or petrol costs. The objective of this study is therefore to determine the non-linear effect of changes in petrol prices on inflation by means of a threshold analysis. The econometric equation included inflation as the dependent variable with the petrol price as the independent variable and GDP as the control variable for the period 2001 to 2018. The Johansen cointegration model was utilised to determine both the long- and short-run relationships between the variables. The methodology also included a threshold analysis to determine at what level of the petrol price inflation is affected to increase significantly over time. The results indicated a cointegration equation with long-run relationships between the variables, while the VECM analysis showed that the effect of petrol price changes was non-linear. Furthermore, excessive increases in petrol prices aggravate inflation levels. A threshold petrol price level was also determined. In the short run, price increases had no significant impact on inflation and economic

growth. In conclusion, the continuing increases in petrol prices over the last decade have had a significant and negative impact on inflation and economic growth in the long run in South Africa. In order to keep inflation under control, cost-push factors, including petrol and energy prices, need to be kept at moderate levels or even below the threshold level as determined in this study.

Key Words: Inflation; non-linear effect; petrol price; South Africa; threshold analysis

JEL Classification: E3, O4

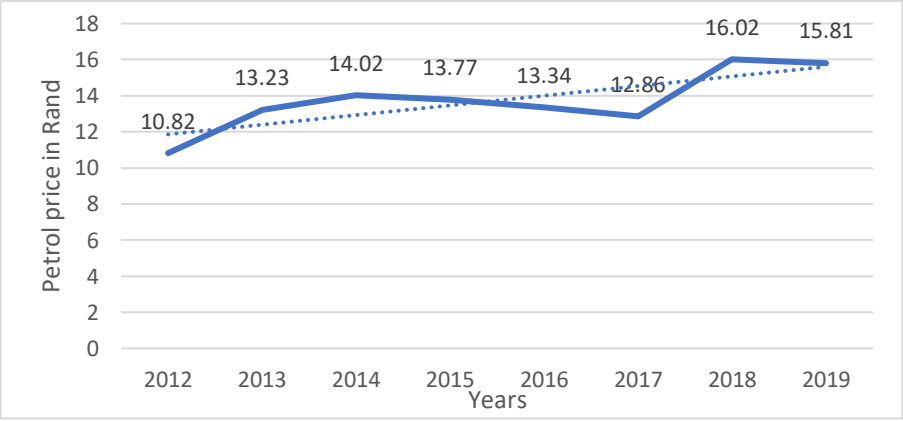
1. INTRODUCTION

Since the beginning of the 1970s, the global economy has experienced a number of fuel price increases, mostly due to supply shocks, leading to economic crises. In 1973, with the start of the Yom Kippur War, the first major oil crises started, leading to stagnant economic growth accompanied by inflation. This led to the formulation of the term stagflation (Barsky & Kilian, 2001). In 1979, the Iranian Revolution disrupted oil supply in the Middle East, which led to the next economic crisis (Painter, 2012). Economies in both developed and developing countries and regions are significantly negatively affected by rapid increases in fuel prices, known as price shocks (Cunado & Perez de Gracia, 2005). Although renewable energy sources have come to the fore over the last decade, fuel (including petrol and diesel) remains a dominating energy source. On a global scale, energy prices still significantly affect the global economy and markets (Katircioglu, Sertoglu, Candemir & Mercan, 2015). The importance of the phenomenon of rapid fuel price increases has been one of the major causes of global recessions, excepts for one since the end of World War II (Brown & Yucel, 2002).

When global fuel prices are analysed, high levels of volatility are evident. From 2008 to 2019, since the financial crises, the price of Brent crude oil showed extreme changes and shocks. In the midst of the financial crises, in December 2008, the price of oil was $40 per barrel, and reached $126 per barrel at the end of the first quarter of 2012. Towards 2016, however, the prices dropped to a record low of only $30.5 per barrel. In October 2018, the price once again peaked at $86, but reached a low again at the end of 2018 of $50 per barrel. Due to factors such as global political instability and supply and demand fluctuations, the price again spiked in April 2019 to $74 per barrel and the current price in July 2019 is $64 per barrel (Macrotrends, 2018). Because South Africa is a fuel importing country, the volatility and fluctuations also affect fuel prices. Figure 1 depicts petrol prices

changes for 95-octane in Gauteng in South Africa since 2012. The increases in the petrol price in South Africa have been dramatic, and since 2012 to July 2019, the price has increased by 46.1% with an average annual increase of 7.7%. Of major significance are the petrol price increases over the last two years of 22.9% (SAPIA, 2018). The rapid petrol price increases, and other factors such as rising electricity costs, have resulted in increases in inflation, but with economic growth well below 1 percent, leading to a situation of stagflation. South Africa is also experiencing supply-cost inflation and not cost-push inflation (Kabundi, Schaling & Some, 2015). The objective of this study is therefore to determine the non-linear effect of changes in petrol prices on inflation by means of a cointegration and threshold analysis.

Figure-1: Petrol price fluctuations in South Africa



Source: SAPIA, 2019

2. LITERATURE REVIEW

From a theoretical point of view, the relationship between energy or specifically petrol prices and economic indicators relates in most cases to a non-linear relationship (Lee & Chang, 2007). This interesting relationship is realised in the event of rapid and unexpected petrol price increases having a negative impact on aggregate demand as a result of overall increases in prices. This then leads to inflation and a diminishing effect on real income and demand. Both demand and supply are affected by petrol price increases and supply is affected via higher production costs with less output (Cunado & Perez de Garcia, 2005). Brown and Yücel (2002) state that petrol price increases have many negative impacts on the economy, such as adverse impacts on spending by consumers; increasing production costs; contributing to negative trade surplus; changes in demand for

money and resulting monetary policy; and lastly market volatility and an unstable economic environment. Changes in the petrol price have an impact on inflation, but empirical results from other studies indicate mixed results on the significance of the impact (Lescaroux & Mignon, 2008; Barsky & Kilian, 2004; LeBlanc & Chinn, 2004). Literature, as analysed, mostly concludes that petrol price shocks adversely affect economic growth. Brown and Yucel (2002) even go as far as to indicate that ongoing rapid petrol price increases are in some cases a leading indicator of a possible recession due to increases in production cost and subsequent outputs (Huang, Hwang & Peng, 2005; Cologni & Manera, 2008).

Within an Asian context, Cunado and Perez de Gracia (2005) investigated the relationship between increases in the petrol price on economic output and inflation from 1975 to 2002. Results indicate negative impacts on economic growth and inflation, but mostly in the short run. As could be expected, granger causality flows from petrol price increases to the other two variables. Cunado, Jo and Perez de Gracia (2015) did a similar study for the period 1997 to 2014 in Japan, Korea, India and Indonesia. The final results surprisingly indicate that petrol price increases did not significantly impact on the economies of these countries. In a further study in 17 Asian countries, Chang, Jha, Fernandez and Jam'an (2011) also tested the impact of petrol price shocks on selected economic variables, including GDP, inflation and unemployment in 17 Asian countries. They also found a negative impact only in the short run. Tang, Wu and Zhang (2010) analysed the relationship between the variables in China from 1998 to 2008, while Wei (2010) completed a similar study from 1995 to 2008. Results from the studies are interesting and indicate a negative impact of petrol increases on economic growth in both the long- and short run, and a positive relationship with inflation. Results also show that output is negatively affected by petrol price increases and inflation. Their results even indicate that a one percent increase in the petrol price could have a 0.38 percent negative impact on economic output. Other findings from these studies are that petrol price changes have a non-linear relationship with growth and inflation, and causality runs from petrol price (Popp, Oláh, Fekete, Lakner & Máté, 2018).

In developed countries, interesting empirical results were also found. In a study including 26 OECD countries, by Katircioglu, Sertoglu, Candemir and Mercan (2015), the impact of changes of petrol prices on the economic performance of the mostly developed countries from 1980 to 2011 was analysed. Results confirmed a long-run relationship between the petrol price, GDP, inflation and employment. Papapetrou (2011) found similar results in Greece, while Lardic and Mignon (2006) and Roeger (2005) analysed a number of European countries and also

found that petrol prices negatively impacted on GDP in both the long- and short run. The studies found that the impact on GDP was mostly negative with a coefficient of -0.5 percent in the short run, and even a -1.0 percent impact over the long-run.

More empirical studies by Cavalcanti and Jalles (2013) in the US, and Cologni and Manera (2008) in the G-7 countries from 1980 to 2003 found that, for these countries, petrol price increases had a negative impact on GDP and a positive impact on inflation. Peersman and Van Robays (2012) did a similar study from 1986 to 2010 for industrialised countries, and found that if the rise in petrol prices is due to economic growth on a global scale, it could lead to a decline in GDP and an increase in inflation. The results for oil exporting countries are different, and such countries are not affected in the same way by such increases.

In different types of analyses, Korhonen and Ledyaeva (2010) studied both petrol exporting and importing countries to determine the difference in the impact of price increases. For a country such as Russia, which exports fuel, the increase has a positive impact on GDP. However, for countries that predominantly import fuel, such as Japan, China, Finland, Germany and the UK, increases had a mostly negative impact on GDP. In other similar studies, Lescaroux and Mignon (2008) analysed the impact of increases in 36 countries, which included both fuel importing and exporting countries and found similar results. Iwayemi and Fowowe (2011) studied the impact of fuel price increases on the Nigerian economy from 1985 to 2007, which economy is dominated by the exports of oil and concluded for this country that price shocks do not negatively impact on the local economy.

Lastly, Nkomo (2009) completed a study in South Africa to determine the impact of petrol price increases on the economy. The country is dependent on the import of crude oil and is also affected by exchange rate fluctuations affecting prices. It was found that increasing petrol prices had a negative impact on economic activities with external factor resulting in continuous volatility and price uncertainty. In conclusion, and from the above analysis, different countries are affected differently by rising oil prices. Factors such as currency stability, export or import focus are causing different scenarios. The focus of this study is, however, on the impact in a petrol importing developing country and the relationships between the selected variables.

3. METHODOLOGY

In order to capture the non-linear effect of petrol price on inflation, we begin by specifying a standard quadratic equation as follows:

$$lcpi_t = \alpha_0 + \alpha_1 lpet_t + \alpha_2 lpet_t^2 + \alpha_3 lgdp_t + \epsilon_t \quad (1)$$

In the model, $lcpi$ is log of consumer price index, $lpet$ is log of petrol price, $lpet^2$ is the non-linear term, $lgdp$ is log of GDP, $\alpha(\alpha_0, \alpha_1, \alpha_2, \alpha_3)$ is a vector of parameters to be estimated and ϵ is the error term. The non-linear hypothesis in this specification centres around coefficients α_1 and α_2, in that for the effect of petrol price on inflation to be deemed non-linear, the two coefficients must be significant and carry opposite signs. If α_1 and α_2 are negative and positive, respectively, and both are statistically significant, it indicates a U-shaped relation between petrol price and inflation; therefore, petrol prices at moderate levels help in reducing inflation, while high petrol prices cause inflation to soar. On the other hand, if α_1 and α_2 are positive and negative, respectively, and both are statistically significant, then an inverted U-shaped relation between petrol price and inflation is evident; therefore, petrol prices at moderate or low levels cause inflation to rise, while high petrol prices help in reducing it. If, however, both α_1 and α_2 bear the same sign, or if the non-linear term is not statistically significant, then it indicates that the relationship between petrol price and inflation is linear. Within this specification, the threshold of petrol price beyond which it aggravates (or mitigates) inflation is determined by finding the first order partial derivative of equation (1) with respect to petrol prices. Therefore,

$$\frac{\partial lcpi_t}{\partial lpet_t} = \alpha_1 + 2\alpha_2 lpet_t \quad (2)$$

By setting equation (2) equal to zero and solving for petrol price, we get a candidate for an optimum:

$$lpet^* = e^{\frac{-\alpha_1}{2\alpha_2}} \quad (3)$$

Equation (3) is the threshold petrol price that represents the minimum (or maximum) price beyond which inflation rate increases (or is mitigated) if the second-order partial derivative of equation (1) is positive (or negative). To determine whether the variables in the model have long-run relationships, the cointegration technique of Johansen (1988) and Johansen and Juselius (1990) was employed. This technique is applicable only if all the variables in the model are

integrated of order one; therefore, it was preceded by unit root tests. Based on this, the following error correction model (ECM) is formulated:

$$\Delta Z_t = \Pi_k Z_{t-k} + \sum_{i=1}^{k-1} \phi_i \Delta Z_{t-i} + \epsilon_t \qquad (4)$$

Where Δ is the difference operator, Π and ϕ are (p x p) matrices of unknown parameters, k is lag order and ϵ_t is the error term. The long-run parameters that are represented in the model by vector Π are defined as multiples of two vectors α and β', such that $\Pi = \alpha\beta'$, where α represents the speed of adjustment from disequilibrium, while β' indicates a vector of long-run coefficients such that $\beta' Z_{t-1}$ in equation (4) represents up to $(p-1)$ cointegrating relationships in the model. Johansen and Juselius (1990) developed two likelihood ratio tests, which are based, respectively, on the maximal eigenvalue and the trace test. The former is based on the null hypothesis of 'r' cointegrating vectors against the alternative of '$r+1$' cointegrating vectors, while the latter is based on the null hypothesis of at most 'r' cointegrating vector(s) against the alternative of more than 'r' cointegrating vectors. For this study, quarterly data for South Africa from the first quarter of 2001 to the third quarter of 2018 were used. All the data are sourced from the South African Reserve Bank (SARB).

4. ESTIMATION AND RESULTS

The descriptive statistics of the variables in the model are presented in Table 1. The number of observation for each series is 71, representing the number of quarters in the data. The highest and the lowest values of CPI were 108.9 and 41.47. The petrol price peaked at 1 708 cents per litre in the third quarter of 2018, while it was at its lowest (357 cents) in the fourth quarter of 2001. Moreover, the variance is quite large for all the series, as shown by the substantial differences between the maximum and the minimum values of the variables. This is further reinforced by the high standard deviation value for all the series, which implies that the data points are quite spread out around their means.

Table 1: Descriptive statistics

	Mean	Std. dev	Min	Max	Obs
cpi	70.1760	20.1856	41.47	108.9	71
pet	888.4837	382.9713	357	1708	71
gdp	2672797	370158.4	1994180	3157231	71

The results of the unit root tests conducted on the variables are reported in Table 2. The tests were conducted based on the automatic lag selection by the Akaike information criterion (AIC), with the inclusion of intercept in each equation. The tests were conducted on both the level and first differences of the lagged series. As reported in the table, both the ADF and PP unit root tests agree that all the three variables are integrated of order one (I(1)).

Table 2: Unit root tests

	Level		First difference	
Variable	ADF	PP	ADF	PP
lcpi	0.423	-0.239	-3.105**	-4.945***
lpet	-0.865	-0.611	-8.261***	-10.069***
$lpet^2$	-0.691	-0.387	-8.207***	-9.842***
lgdp	-2.575	-2.815	-4.651***	-4.586***

Note: *** and ** indicate significance at 1% and 5%, respectively.

The selection of optimal lag length for our model was based on the outcome of the Akaike information criterion (AIC). As shown in Table 3, the AIC recommends optimal lag length as lag 3; therefore, we adopt it for our estimations.

Table 3: Lag order selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	255.7549	NA	6.40e-09	-7.5150	-7.3834	-7.4629
1	674.8368	775.6142	3.81e-14	-19.5473	-18.8895*	-19.2869*
2	694.7532	34.4821	3.41e-14	-19.6642	-18.4796	-19.1955
3	716.3666	34.8394*	2.9e-14*	-19.8318*	-18.1207	-19.1547
4	729.6895	19.8849	3.25e-14	-19.7519	-17.5143	-18.8665

Note: * denotes lag order selected by the criterion; LR = sequential modified LR test statistic; FPE = final prediction error; AIC = Akaike information criterion; SC = Schwarz information criterion; HQ = Hannan-Quinn information criterion

4.1. Cointegration test

Table 4 presents the result of the cointegration test based on Johansen (1988) and Johansen and Juselius (1990). From the results, both the trace statistic and Max-Eigen statistic are unanimous in their respective positions that there exists one cointegrating equation among the variables. This conclusion is reflected in the values of the trace statistics and Max-Eigen statistics being greater than their respective critical values at the 1% level of significance. This result confirms a cointegrating relationship between the variables and similar results were observed by Papapetrou (2001).

Table 4: Johansen cointegration test

Hypothesised no. of CE(s)	Trace statistic	Critical value (5%)	Max-Eigen statistic	Critical value (5%)
None	58.0906***	47.8561	34.9042***	27.5843
At most 1	23.1864	29.7970	15.2914	21.1316
At most 2	7.8950	15.4947	6.9268	14.2646
At most 3	0.9682	3.84146	0.9682	3.8414

The result of the estimated VECM with CPI as the dependent variable is presented in Table 5. The coefficient of petrol price is significant and negative, while the coefficient of the non-linear term is positive and significant. This result confirms that the effect of petrol price on inflation is non-linear over the study period, and

as indicated by the signs of the respective coefficients of the petrol variables, increases in petrol price reduce inflation when the petrol price is still at moderate levels. However, increases in petrol price lead to an increase in inflation when the petrol price is rising rapidly. This implies that excessive increases in petrol price aggravate inflation. This finding corroborates the position that empirical research is undecided on the level of the impact of fuel price increases on inflation (Barsky & Kilian, 2004; Lescaroux & Mignon, 2008). It also supports the conclusion of Du, Yanah and Wei (2010) that economic growth and inflation are significantly affected by petrol price changes and that the effect is non-linear. The double impact of the petrol price on inflation points to the existence of an optimum threshold needed to ensure that inflation is kept at lower levels. This indicates a turning point between the two petrol price coefficients beyond which the petrol price begins to affect inflation positively. This threshold of the petrol price is given by equation (3), and is computed to be 1,214.64 ($e^{\frac{(6.422682)}{2(0.452161)}}$). This result implies that at any petrol price above 1 214.64 cents per litre, inflation significantly increases. Specifically, the results indicate that at any price beyond the threshold, a 1% increase in the price of petrol leads to about 0.45% increase in inflation in the long run. In order to keep inflation at moderate levels, the petrol price should be kept constant or below the threshold price. The result also shows that the coefficient of GDP is positive and statistically significant, indicating that improvement in economic growth leads to higher inflation. Specifically, the result implies that, ceteris paribus, a 1% rise in economic growth is accompanied by a 3.06% increase in inflation, and *vice versa*.

Table 5: VECM cointegrating result (lcpi as dependent variable)

Variable	Coefficient	Std. error	t-Statistic
lpet (-1)	-6.4226	1.1147	5.7618
$lpet^2$ (-1)	0.4521	0.0750	6.0280
lgdp (-1)	3.0604	0.5446	5.6192

Turning to the short-run results as shown in Table 6, the error correction term (ECT) is shown to have a negative, less than one, and significant coefficient. This indicates that there is a tendency for any past disequilibrium to be corrected in the current period, with the speed of adjustment very low at about 1.9%. As for the petrol price variables, though the coefficients of the joint lags of both petroleum

prices and the non-linear term carry opposite signs, with the former and the latter being negative and positive, respectively, neither of the two coefficients is significant. This indicates that, in the short run, changes in petrol price have limited impact on inflation. This result contradicts the finding of Cunado and Perez de Gracia (2005), who claim that the impact of the petrol price on economic growth and inflation is mainly in the short run. The coefficient of the joint lag of GDP is positive, but statistically insignificant, implying that, in the short run, economic growth has no significant impact on inflation. These short-run results show that over the study period, the short-run dynamics of petroleum prices and economic growth do not matter as far as inflation is concerned.

Table 6: VECM short-run dynamics (lcpi **as dependent variable)**

Variable	Coefficient	Std. error	t-Statistics
ect_{t-1}	-0.0187	0.0179	-2.0453
$\Delta(lpet(-1))$	0.0774	0.2062	0.3753
$\Delta(lpet(-2))$	-0.0934	0.1978	-0.4722
$\Delta(lpet(-3))$	-0.2624	0.1776	-1.4772
$\Delta(lpet^2(-1))$	-0.0071	0.0151	-0.4690
$\Delta(lpet^2(-2))$	0.0044	0.0146	0.3059
$\Delta(lpet^2(-3))$	0.0215	0.0133	1.6191
$\Delta(lgdp(-1))$	0.1019	0.2042	0.4992
$\Delta(lgdp(-2))$	0.0211	0.2167	0.0977
$\Delta(lgdp(-3))$	0.0031	0.2026	0.0155

The results of the granger-causality test conducted to ascertain the direction of causality among the variables are presented in Table 7. To measure the direction of causality among the variables, the study employed F-Statistics constructed under the null hypothesis of no causality. As shown in the table, the null hypotheses that petrol price (or the nonlinear term) does not granger cause inflation, and *vice versa*, are both rejected, indicating a bi-directional causal relationship between petrol price variables and inflation. Similar findings were estimated by Nkomo (2009) and LeBlanc *et al*. (2004). On the other hand, the null hypotheses that economic growth does not granger cause inflation and *vice versa*

are both accepted, implying no causal relationship between economic growth and inflation, thereby confirming the short-run result discussed earlier. Furthermore, the null hypothesis that economic growth does not granger cause petrol price variables is rejected, while the null hypothesis that petrol price variables do not granger cause economic growth cannot be rejected, indicating that the causality between petrol price variables and economic growth is unidirectional, with causality moving from economic growth to petrol price variables. Similar results were obtained by Peersman and Van Robays (2012).

Table 7: Granger causality test

Null hypothesis	F-Stat	Probability	Decision
lpet does not Granger cause lcpi	5.37	0.003**	Reject
lcpi does not Granger cause lpet	4.99	0.005**	Reject
$lpet^2$ does not Granger cause lcpi	5.43	0.004**	Reject
lcpi does not Granger cause $lpet^2$	4.77	0.007**	Reject
lgdp does not Granger cause lcpi	1.33	0.2731	Do not reject
lcpi does not Granger cause lgdp	1.88	0.1467	Do not reject
lgdp does not Granger cause lpet	3.63	0.023**	Reject
lpet does not Granger cause lgdp	1.19	0.328	Do not reject
lgdp does not Granger cause $lpet^2$	3.02	0.0415**	Reject
$lpet^2$ does not Granger cause lgdp	1.08	0.365	Do not reject

Note: ** indicate significance at 5%.

Finally, the results of the diagnostic tests are listed in Table 8. The null hypothesis of no serial correlation cannot be rejected for all the three lags in the model. It can, therefore, be concluded that the model is free from the problem of serial correlation. The result of the normality test shows that the four variables in the model exhibit normal distribution, as we cannot reject the null hypothesis that each of the residuals of each of the variables is distributed normally. Finally, we cannot reject the null hypothesis that our model suffers from heteroskedasticity, with the insignificance of the chi-square coefficient.

Table 8: Diagnostic tests

Type of test	Prob.
Serial correlation LM test	0.1072
Normality test	0.2490
Residual heteroskedasticity test	0.2174

5. CONCLUSIONS

Rapidly rising general fuel and petrol prices constitute shocks on economies, leading to cost-push inflation, particularly in oil-importing countries and this includes South Africa. This study had the objective to analyse and determine the non-linear effect of changes in petrol prices on inflation by means of a cointegration and threshold analysis. The objective was successfully achieved via both a literature review and by means of an econometric time series data analysis of the relationships between the variables included in the study in South Africa, which is an oil-importing country. Results from the empirical section of the literature review confirmed that the energy sector is still dominated by the oil/fuel market and that this energy source continues to significantly impact economies, although the market share of the renewable energy sources is increasing steadily (Popp, Lakner, Harangi-Rákos & Fári, 2014).

The study found interesting results indicating that a non-linear relationship existed among the variables, namely inflation (listed as CPI), petrol price and economic growth. It also supports the conclusion of Du, Yanah and Wei (2010) that economic growth and inflation are significantly affected by petrol price changes and that the effect is non-linear in the long run. It was also determined that an optimal threshold exists for the petrol price and its relationship with inflation. Rising petrol prices have a significant impact on inflation and the economy in the long run, but not in the short run. Economic growth also does not have a short-run impact on inflation.

Limitations in the study include the availability of data and that only a limited number of variables could be included. This research topic is interesting and future studies will include comparisons between developed and developing countries, as well as panels or grouping of countries. Other variables could also be added to the model such as the exchange rate and the producer price index (PPI). Other options for future studies are to also compare countries with different

sectoral compositions and the effect of the fuel price (Máté, Oláh, Laknern & Popp, 2017).

The implications of the study are that the petrol price significantly affects inflation and economic growth in South Africa, and that the petrol price should as far as possible be kept at relatively stable and low levels. This is because, as shown from our results, if the price surpasses a specific level, the impact on inflation escalates. The results of this study could be used to re-evaluate the current economic policy that requires urgent amendments due to structural problems and the low-growth trap the country is in. Shocks from fuel prices have significant impacts on the economy, but also on monetary and fiscal policy, and directly affect government income and consumer spending. South Africa, as an oil-importing country, urgently needs to investigate and implement the increased use of renewable energy sources to reduce the dependency on fuel imports.

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THE USE OF PARTICIPATORY ACTION RESEARCH IN A PARTICIPATIVE DEMOCRACY: IN CRITIQUE OF MECHANISMS FOR CITIZEN PARTICIPATION

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–Abstract–

This paper aims to analyse government-developed citizen participation mechanisms in South Africa against the backdrop of Participatory Action Research (PAR) as a community development tool. Furthermore, the researchers investigate the concept "civic participation" to develop a potential framework for PAR in third-world democracies such as South Africa. The research methodology involved a critical desktop analysis of books, articles, regulatory policies, and strategy documents to analyse PAR as a possible development process for democratic participative governance. The research revealed that community challenges can only be solved by empowering citizens to identify and address problems within their respective communities, as well as to monitor the actions of elected and appointed public officials. Furthermore, ordinary people can cooperate with local government through civic structures to improve their social conditions. PAR can empower community members to participate in local government decision-making structures and processes. This paper recommends that this process should empower all stakeholders to gain the necessary insight and knowledge to develop action plans for community problems. PAR is the ideal

avenue to foster partnerships between government and communities.

Key Words: participative democracy, empowerment, community development, participatory action research

JEL Classification: ZOO

1. INTRODUCTION

In recent years, empowering citizens to participate in government decision making has become paramount in development thinking (Bekker, 2004). More recent debates on citizen-focused development through civic participation were driven by the former Millennium Development Goals (United Nations [UN], 1990). Public participation is undeniably a key cornerstone of a democratic country and good governance. Democratic decision making is based on the principle that every citizen who is affected, or might be affected, by a governance-related decision has the right to participate in government decision-making processes (University of Oregon, 2003). To ensure that this participation right is met, citizens should have access to democratic structures and processes, while government officials should respond to the needs of those who are affected by their decisions. Civic participation is of such importance that the UN started viewing "community participation" as a synonym for "community development" in the early 1950s (Bude, 2004, cited in Auriacombe, 2015). As this paper aims to gain a deeper understanding of civic participation, the first objective is to present a conceptual and contextual analysis of this term with specific reference to African democracies. The second objective is to outline the role of participative democracy within the South African context. The third objective is to assess Participatory Action Research (PAR) as a development framework for democratic collaborative governance on a local government level.

2. CIVIC PARTICIPATION AT THE LOCAL GOVERNMENT LEVEL

Civic engagement implies using governance processes and structures to improve communities' wellbeing. This is done by developing and combining knowledge and skills to improve citizens' lives, as well as the communities in which they live (Michels & De Graaf, 2010). A conceptual and contextual analysis of civic participation at the local government level highlights various perspectives of both the term and its role in development (Deetz, 2007; Deetz & Irvin, 2008). Subsequently, several country-specific factors and aspects relating to respective democratic government dispensations play a role in defining civic participation (Barber, 2003). Civic participation does not always imply citizen participation in

the real sense of the word; nor does good governance end at the ballot box. Some authors (Kay, 1970; Hanberger, 2006) argue that there are various levels of civic participation. The continuum ranges from limited participation (citizens are involved sporadically by electing politicians who are tasked with giving them regular feedback), to collaborative civic participation (citizens and local government officials work as a team to improve communities) (Barber, 2003).

The first level of democracy is where citizens allow government officials to make decisions on their behalf and only expect incremental feedback from municipalities (Rowe & Frewer, 2005). Hanberger (2006) refers to this form of governance as "elitist democracy". Prior to 1994, the South African public service could have been regarded as an elitist democracy, as it did not provide for civic participation (Ngqele, 2010). Most citizens who were marginalised and excluded from governance processes during apartheid now face the challenge of participating in network governance and exercising their political rights and duties. The second level of democracy is characterised by an evolution in representative democracy. As such, governing officials are held accountable to their electorate (Hanberger, 2006). Citizens demand to form part of government decision-making processes to ensure that public services are improved. With citizen-focused democracy, violent community protests could erupt if citizens are not satisfied with service delivery, as is the case in South Africa (Hanberger, 2006). The third form is deliberative or collaborative democracy. As the highest form of democracy, community stakeholders are involved in deliberations with local government officials. Moreover, governance structures, processes, systems, and programmes focus on citizen participation, collective learning, and monitoring progress (Hanberger, 2006). In democratic countries with deliberative democracies, governments strive towards good governance so that citizens can enjoy the best quality of life possible (Quick & Bryson, 2016, cited in Auriacombe, 2015). Good governance follows a set of principles, namely participation, collaboration, transparency, responsibility, consensus, equality, and accountability. As such, it empowers citizens to prosper and progress towards sustainable socioeconomic development and economic freedom (Helao, 2015).

Participative and collaborative democracies must adhere to specific governance requirements. Notably, democratised service delivery cannot take place if these requirements are not implemented (Muthien, 2013). As the South African government is a signatory to the African Union's Charter on Democracy, Elections and Governance, it must comply with its provisions on the rule of law,

the principle of equal human rights for all citizens, as well as relying on the outcome of the judiciary and the legal instruments for democratic and participative governance (Maphunye, 2014). The following section focuses on participative democracy from a South African perspective.

3. REQUIREMENTS FOR CIVIC PARTICIPATION IN SOUTH AFRICA

In a deliberative democracy (Helao, 2015), citizens are civically educated and empowered to participate in local government structures and processes (Michels & De Graaf, 2010). As citizens participate in governance-related decision making, it helps to ensure that their needs are met (Evans, 2011). In line with this, Alexander and Kane-Berman (2014) point out that citizens must have access to quality basic services. Moreover, communities are not overly reliant on the government and take responsibility for their wellbeing by utilising available resources for self-development (Evans, 2011). Furthermore, local economic growth is stimulated through networks consisting of local authorities, communities, and the private sector, which leads to more job opportunities (Alexander & Kane-Berman, 2014). Democratising service delivery implies that decisions should be decentralised, accessible, and transparent to citizens (Muthien, 2013). Despite all its challenges, South African public governance reform has made great strides since 1994 and forms part of more recent developments such as New Public Management and networked management.

The fragmented, undemocratic apartheid system was transformed into a unified, integrated, and decentralised government that functions on a national, provincial, and local level (Maphunye, 2014; Nel & Denoon-Stevens, 2015). The White Paper on Local Government (1998) contains a comprehensive legislative and policy framework to develop local government into a participatory governance structure. The Municipal Systems Act (No. 32 of 2000) underscores the importance of public participation. As such, it mandates local governments to capacitate public stakeholders, councillors, and municipal officials to engage in participatory processes. Furthermore, the Municipal Systems Act highlights that community participation lies at the core of effective and accountable municipal service delivery. It is therefore municipalities' responsibility to ensure that local community stakeholders, including traditional leaders, participate in governance structures and processes (Rowe & Frewer, 2005). Municipalities must therefore:

- consider residents' concerns when drafting by-laws and policies, as well as planning and implementing programmes such as integrated development plans (IDPs);

- provide communities with information and feedback regarding government activities on a regular basis (Alexander & Kane-Berman, 2014);
- ensure that councillors inform councils of the needs expressed by communities;
- invite community stakeholders to attend ward committee meetings to discuss community needs (Alexander & Kane-Berman, 2014);
- provide democratic and accountable government structures within local communities to promote socioeconomic development and a safe and healthy environment (Nel & Denoon-Stevens, 2015);
- provide services to communities in a sustainable manner;
- encourage the involvement of communities and community organisations in local government matters (Alexander & Kane-Berman, 2014); and
- ensure collaboration and information sharing between community stakeholders, council representatives, and the private sector to improve the wellbeing of their respective communities (Evans, 2011).

An efficient public service plays a vital role in enhancing the developmental potential and wellbeing of a county and its citizens (Chikulo, 2013). Judging from the above, considerable strides have been made in South African public governance reform (Maphunye, 2014). The Public Service Commission (PSC, 2014), however, highlighted that laws and policies are not always easy to implement. The governance capacity of a participative democracy depends on the competence and effectiveness of its public administration (especially provincial and local government), as well as on the way that service delivery is managed (PSC, 2014). The PSC (2014) highlighted the following key challenges:

- In general, there is no integration between the three spheres of government. In some cases, national and provincial plans are not integrated with local IDPs (The Presidency, 2014).
- There is ambiguity regarding which sphere of government is responsible for implementing and financing specific functions.
- Provincial government often decentralises functions to municipalities without prior discussions or providing the necessary funding. As such, local government does not have the capacity to deliver the services (Nel & Denoon-Stevens, 2015).

- Provincial departments are lax in signing service agreements with local government and the private sector. In many cases, they fail to honour the conditions for funding community projects.
- The size of South African municipalities makes service delivery and community involvement extremely difficult (Alexander & Kane-Berman, 2014). Dwindling municipal resources also make it impossible to deal with high service demands (Ovens, 2013; Manyaka, 2014; Alexander & Kane-Berman, 2014).
- Communities should be encouraged to become involved in participatory processes; however, citizens are excluded from integrated planning and budgeting processes regarding municipal services.
- Section 152 of the Constitution of South Africa (1996) states that local government is not responsible for socioeconomic development, as is expected by the former Reconstruction and Development Programme. This has serious implications for community development (Nel & Denoon-Stevens, 2015).
- Poor accountability, corruption, nepotism, political appointments, and few clean audits remain a challenge (Alexander & Kane-Berman, 2014).
- Local government officials rarely follow the *Batho Pele* code of conduct when dealing with citizens.
- Local government indicators need to be developed, while functions need to be monitored more meticulously (The Presidency, 2014).
- A shortage of technical skills in all spheres of government remains a problem (PSC, 2014).

In theory, South Africa has implemented the democratic ideals of public participation and good governance (National Planning Commission [NPC], 2012). The government's public participation mechanisms are, however, insufficient to reach the National Development Plan (NDP) goal of maximising citizen development through collaboration between the public and the private sector (NPC, 2012). According to the Presidency (2012:64), "the foundations for a capable state have been laid, but there are major concerns about the weaknesses in how these structures function, which concerns the state's ability to pursue key development objectives".

In certain cases, there is little or no citizen participation, as well as limited public awareness of avenues to participate in local government processes (De Visser,

2009; Mautjana & Maombe, 2014). Despite legislative instruments such as the Constitution, structures (e.g. ward committees and councils), and processes (e.g. IDPs), "true participatory planning appears to be low as municipalities merely 'go through the motions' to comply with legislation and take limited account of inputs received" (Nel & Denoon-Stevens, 2015:3). Area-based ward committees are expected to play a critical role in linking community needs with IDP planning processes (Ngqele, 2010) and to assist local governments in bringing about people-centred, participatory, and democratic local governance. The rationale behind ward committees is to extend the roles of ward councillors to strengthen the relationship between the public and private sectors (Edigheji, 2005). Ward committees are therefore expected to facilitate local community leaders' participation in governance decisions. It is believed that these committees could add a practical dimension and substance to participative governance (Esau, 2007). Furthermore, it could facilitate a sense of community solidarity, self-development, and citizen responsibility (Michels & De Graaf, 2010). Active participation and close involvement in a well-functioning governance network should therefore:

- enhance the legitimacy of decisions, as citizens are in tune with community needs;
- help citizens to develop the civic skills and team values needed to ensure participation;
- empower citizens by including them in public decision-making processes;
- facilitate economic empowerment within communities;
- increase the quality of infrastructure and services in communities;
- enhance democracy and accountability; and
- work towards community cohesion, nation building, and community integration (Esau, 2007).

Not all municipalities have ward committees, as it is not mandatory to establish them (Putu, 2006). Even where municipalities have ward committees, there is no guarantee that they would be used for anything more than a rubber stamp of approval from citizens. Ward committees can currently only function in an advisory capacity and can therefore only make suggestions to councillors or the council. As a result, communities may feel frustrated and view the process as mere lip service. Councillors tend to become antagonistic towards ward committees when they attempt to ensure accountability and transparency among governance officials.

Although citizens have access to governance structures and processes, public officials are not responsive to community inputs. Section 195(1)(e) of the Constitution underscores the importance of responding to citizens' needs and facilitating public participation in governance decisions. Participatory bodies such as ward committees cannot function efficiently if the public does not view them as legitimate structures (Bekker, 2004:46). In most communities, public officials are reluctant to develop trusting relationships with communities through power sharing. Furthermore, "public officials fail to acknowledge that a collaborative democracy focuses on reaching common ground or consensus by considering multiple perspectives" (Auriacombe, 2015). Collaborative democracy is characterised by good communication, shared values, willingness to make mutual decisions, and collaborating to implement community-focused action plans. Furthermore, the lack of strong leadership and a sense of solidarity among citizens make it difficult to involve the public in community development (Nel & Denoon-Stevens, 2015).

Apart from ward committees, another way that citizens can participate in local government services is through surveys; however, opinion surveys have a limited effect on governance decisions (Michels, 2011). Nonetheless, the South African government often uses data collection and interpretation to analyse and find solutions to community-related challenges, as well as to develop action plans to address poverty and marginalisation **(**Nel & Denoon-Stevens, 2015). Yet another approach is the South African "social security system, whereby poor and vulnerable members of society receive free basic services, such as water, electricity, housing, education, healthcare and cash grants" (Auriacombe, 2015). This places an extra burden on municipal capacity. The number of social security grant beneficiaries has grown from two million in 1994 to approximately 20 million in 2018. As such, a third of the country's population receives assistance and as a result, funding for community development programmes is severely affected. South Africa still operates within a dependency framework and therefore implements a control-orientated form of participation. Within this context, the public's right to participation is accepted, yet the council has the final say (Nel & Denoon-Stevens, 2015). Truly democratising service delivery implies that decisions should be decentralised, accessible, and transparent to citizens (Muthien, 2013). In this regard, there is a focus on the three key cornerstones of democratic local government, namely integrated development planning, community participation, and performance management (Schmidt, 2008).

The socioeconomic upliftment of millions of citizens relies, *inter alia*, on investing in human potential and empowering communities to work alongside the government to become self-reliant (PSC, 2014). This is, however, no easy feat as most South African citizens have no or a limited background of democratic participation. It is therefore important to develop mechanisms that promote education, participation, and community development (Zurbriggen, 2014). Evidence suggests that civic structures enable cooperation between ordinary citizens and local government to improve social conditions (Mathie & Peters, 2008; Mathie & Cunningham, 2008). South Africa can only realise its NDP goals by drawing on the strengths of networks within the public and private sectors (NPC, 2012). A key factor in initiating and sustaining networks is to include citizens in these interdependent relationships (Klijn & Koppenjan, 2012). To ensure success, goals, responsibilities, and decision-making powers should be shared among role players (Edigheji, 2005).

The growing number of community protests reflects South African citizens' frustration with local government. Moreover, it highlights their desire to participate in decision making and to ensure that officials and politicians are held accountable (Powell, O'Donovan & De Visser, 2015). It is debatable whether the government is strategically positioned to ensure active citizen involvement in the country's network governance system (Deetz, 2007; Powell, 2012). To become a participative democracy, local government should change its mindset from following a dependency model of doing things for citizens to an empowerment model of doing things in collaboration with citizens. Community challenges can only be solved by empowering citizens to identify and address their own problems, as well as monitoring activities in cooperation with elected and appointed public officials (NPC, 2012). Working in collaboration with local government to address community problems can benefit disempowered individuals on a psychological level, as they start experiencing a sense of belonging and empowerment. It also serves as a catalyst for wider-scale community development, as citizens realise that they are in control of their own destinies. Participative processes should therefore focus on responding to marginalised citizens' needs. The next section assesses PAR as a development framework for democratic collaborative governance on a local government level.

4. PARTICIPATORY ACTION RESEARCH (PAR)

PAR can be regarded as a cyclical, conscious, and knowledge-raising research process that is based on the philosophy of action research and self-actualisation.

The research process merges indigenous and scientific knowledge in a bid to empower communities to bring about meaningful social change (Brydon-Miller et al., 2011). The focus is therefore on strengths, abilities, and opportunities as the foundation for community development (Schurink & Schurink, 2009). PAR typically takes a multi-perspective approach as a range of qualitative or quantitative methodologies and methods can be used. The methods range from informal workshops and conducting quantitative research such as surveys, to conducting, analysing, and interpreting interviews (Huffman, 2017). There are many similarities between the PAR process and community development undertaken by the social welfare profession. The researcher typically acts as a facilitator. Building relationships is therefore a key aspect of the research process and sustainable community development (Aimers, 1999).

With PAR, the actual research takes a backseat to the process of finding common ground, cooperation, empowerment, collaboration, mobilisation, self-realisation, and community solidarity (Huffman, 2017). Stakeholders in the public and private sector should have the opportunity to gain the necessary insight, knowledge, and information regarding a specific situation or challenge, form part of the decision-making process, develop action plans, and address community problems (The Presidency, 2018). Collaboration between citizens, the facilitator/researcher, and local government officials requires a process of mutual deliberation. All participants should therefore be equal partners. Community stakeholders should undergo civic and communication skills training to ensure a sense of equality between partners. Decision-making processes should be transparent and there should be clearly defined, regular communication with the community. PAR has the potential to meet the requirements of the NPC and the special unit in the President's Office tasked with developing a model to spearhead participatory developmental democracy (The Presidency, 2018). Civic groups, such as non-governmental organisations and community-based-organisations, can help fast-track the PAR process. They can play a vital role in ensuring that stakeholders participate directly in decision-making processes by allowing space for negotiation, deliberation, and different viewpoints (Deetz, 2007).

Stakeholder partnerships should be strengthened on a continuous basis through dialogue, reflexivity, joint ventures, and a focus on mutual benefits. Partners should commit to agreed-upon decisions when implementing strategies. The rationale behind PAR is for communities to recognise opportunities and to become more self-reliant by harnessing shared strengths. While there is no recipe

for PAR, the key is to start small but dream big (Enserink, Witteveen & Lie, 2009). PAR has a set of values that all participants should honour to ensure that the research process is democratic, equitable, and focused on the wellbeing of community members (Huffman, 2017; Enserink et al., 2009). The following aspects are of crucial importance:

- Both the government and the community should support the process of evolving from a dependency model to an empowerment model.
- Ownership should focus on interdependent relationships, stakeholder participation, partnerships, and cooperation throughout the PAR process.
- All role players in the PAR process must have equal participation rights and should be treated equally. As there is a focus on inclusivity, participants must respect one another and their community values.
- There should be mutual acceptance, understanding, and social learning, while alternative perspectives must also be respected.
- An element of learning through reflection should be present, so that researchers and community members can examine what they have learned in a systematic and critical fashion.
- All parties involved should be held accountable for reaching objectives and using resources wisely (Enserink et al., 2009; Huffman, 2017).

5. CONCLUSION

It is essential that South Africa creates a participative government system that empowers communities to work alongside local government. If this does not happen, it will lead to more protests with citizens demanding better service delivery. PAR's strength lies in its ability to foster partnerships between the government, communities, and social service practitioners (Patton, 2008). Its goal in governance is to empower community members to participate in local government decision-making structures and processes. Partnership processes can teach participants how to make informed decisions to bring about change in their communities (Nel & Denoon-Stevens, 2015). Decision-making processes characterised by healthy participation structures, democratic processes, and partnerships between the community and municipalities could significantly enhance policymaking in local government. In this regard, PAR could strengthen

policy- and agenda-setting processes and assist with the analysis of community dynamics and priorities.

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AN EMPIRICAL ANALYSIS ON DETERMINANTS OF FOOD SECURITY AMONG FEMALE-HEADED HOUSEHOLDS IN SOUTH AFRICA

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–Abstract–

The importance of food security at household level has been identified as one of the important priorities globally. The second sustainable development goal (SDG2) involves dealing with hunger and food insecurity to the extent that no one goes to bed with an empty stomach. The literature shows that female-headed households, which in most cases are single-parent households - unless the de-facto head principle is, and a woman is a head with a man present- are the most vulnerable households in terms of both poverty and food security. The paper intends to investigate the extent of food insecurity among female-headed households in South Africa using the 2018 General Household Survey (GHS) that collected data from all the nine provinces in the country. The paper employs both descriptive statistics and inferential statistics with a regression model estimated to determine the household factors that are significant determinants of food security at household level among the female-headed household. The apriori expectation is that age, race, income and size of the household will be among the important determinants of food security. The study will also check if those that are receiving a grant are better off than those that do not receive one. The results of the paper will help policy makers to have a more focused approach in dealing with food insecurity at household level.

Key Words: Female-headed households; food insecurity; general household survey; SDGs

JEL Classification: A10 D10 D13

1. INTRODUCTION

The importance of food security at household level has been identified as one of the important priorities globally (The World Bank, 2018). The second sustainable development goal (SDG2) involves dealing with hunger and food insecurity to the extent that by 2030 there should be no person or child whether in developed or developing country that goes to bed with an empty stomach. The 2018 progress report for the zero-hunger goal, which is goal 2, reported some worrying statistics. The number of undernourished people globally increased from 777 million people in 2015 to 815 million in 2016, this in the face of a global initiative to end hunger (United Nations, 2018). The report also indicated that 151 million children under the age of five suffered from stunted growth, 51 million suffered from wasting or lower weight for their height and 38 million were overweight (United Nations, 2018). There was also a considerable drop in agricultural aid to developing countries, and that 26 countries experienced high or moderately high levels of general food prices, which all may affect global food security negatively. These statistics are an indication that the 2030 agenda may not be achievable if momentous changes do not occur on the global scene. The understanding of the importance of food security at household level goes a long way in dealing with global poverty as these are highly linked and have simultaneously led to related problems such as diseases, crime, early death among children, which hinders economic growth. The productivity of any individual is also highly compromised if they cannot afford a basic meal (Dunga & Grobler, 2017). The global approach to food security has taken a wide range of issues into account (United Nations, 2018). The plight of women and children in the poverty discourse is understood clearly and there are attempts in policy formulation that focus on these important segments of society (Alsan, Xing, Wise, Darmstadt, & Bendavid, 2017; Doke, 2015; Ngoma & Mayimbo, 2017; Psaki, McCarthy, & Mensch, 2018).

Food security at household level is more important than food security at national level. It is possible to have food security at national level as this alludes mostly to the availability of food. However, the availability of food at national level does not guarantee food security at household level. Food security at household may be considered in terms of both access and affordability besides availability in the broader society. The literature shows that female-headed households, which in most cases are single-parent households – unless the de-facto head principle is suspended and a woman is a head with a man present – are the most vulnerable household in terms of both poverty and food security (Arene, 2010; S. Chant, 2008; S. H. Chant, 2006). Chant (2008) eloquently pointed out in her discussion of the feminisation of poverty that “If the mounting range of policy interventions

aimed at women's 'economic empowerment' is anything to go by, the astoundingly rapid translation of the 'feminisation of poverty' from opportunistic shorthand to 'fact', has ostensibly been fortuitous" (Chant, 2008:166). The research into the different dimensions and the associated causes of the disadvantages of female households with reference to food insecurity and poverty cannot be overemphasised or exhausted if the problem persists.

It is against this backdrop that this paper attempts to explore the profile of food insecurity status and determinants of food insecurity in female-headed households in South Africa. The rest of the paper is organised as follows: section 2 presents the literature review on food security and pays special attention to the gender or feminisation of food security at household level; section 3 presents the methodology and data used in the analysis; section 4 presents the results; and section 5 the conclusion drawn from the results.

2. LITERATURE REVIEW

The term food security can be traced back to around the time of World War I and II, but it was only in 1974 when the concept of food security was fully conceptualised at the United Nations General Assembly summit on World Food Security Conference held in Rome (United Nations, 1975). The main agenda for the summit was to develop ways and means on how a global agreement could be reached to resolve the world food problem within the broader context of development as well as international economic corporation (UN, 1975). Amongst the discussions held on the day, governments reviewed the global problem of food production and consumption and proclaimed that every man or woman, whether young or old, had the right to be free from hunger and malnutrition in order to develop their physical and mental facilities. At the end of the conference, a universal declaration was signed by all countries on the eradication of hunger and malnutrition (UN, 1975). Another fruitful discussion towards food security was on the definition of the term Food Security. After so many revisions, it was finally defined as a term which exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2006). As such, food security was categorised into three main dimensions, namely, food availability (availability of sufficient quantities of appropriate food), food access (adequate income or other resources to buy food), and food utilisation (adequate quality of food) (FAO, 2015). Just as the definitions of food security are complex, so is the measurement. The term being multidimensional, different types of measurements exist, which are in their capacity well recognised. Bickel *et al*.

(2000:8) argued that the full array of food insecurity and hunger cannot be captured by any single indicator. Instead, a household's level of food insecurity or hunger must be determined by obtaining information on a variety of specific conditions, experiences and behaviours that serve as indicators of the varying degrees of severity of the condition. The most common is the Household Dietary Diversity score, which measures how much households were able to access food – usually in the past 24 hours; and a score is later drawn whereby households found to have eaten less food items are regarded as food insecure. This indicator refers to a qualitative measure of different types of food or food groups consumed over a given reference period (Hodditt & Yohannes, 2002:11). Another indicator is the Coping strategy index, which captures how households cope in times of food shortages. A score is then drawn and calculated whereby those with a high score are regarded as food insecure.

The discourse of food insecurity is mostly seen in the broader discussion on poverty. Chant (2008) referred to it as the feminisation of poverty, which she argues was first coined in the 1970s when food security was popularised. Other numerous authors have described food insecurity in different contents (Akinloye, Putuma, & Adeyefa, 2016; FAO, 2013; Institute, 2016; Labadarios, Mchiza, Steyn, & Gericke, 2011; Ngema, Sibanda, & Musemwa, 2018; Walsh, Rooyen, & Walsh, 2015). Ngema *et al.* (2018) addressed the issue of food security in South Africa. Stats SA (2019) reported that food security problems in the country were most profound at the household level and that in 2017 over 20 percent of the population in the country were food insecure. Ibid further reported that Black African and Coloured headed households were the ones most likely to experience the problem of access to food compared to households headed by Indians/Asians and Whites. Considering the gender aspect, female-headed households in South Africa have not only been found to be food insecure but also distinguished and marred with other socio-economic mishaps. Mncayi and Dunga, (2017) looked at determinants of housing insecurity in South Africa and found that female-headed households were most likely to fall in the category of those being severely household insecure. Similarly, a female-headed household was also found to be pooer. This study, unlike the studies mentioned, investigates the determinants of food security in female-headed households in South Africa, giving emphasis to female-headed households which were selected for this study to achieve its main objective.

3. METHODOLOGY AND DATA ANALYSIS

This paper uses data collected by Statistics South Africa in the general household survey of 2018. The sample comprises all the nine provinces of South Africa, and close to 21000 households were interviewed. For this paper, selected variables fit for the study were employed for data analysis, and later only female-headed households were selected to form the final sample. After data cleaning of the selected variables and households, a total of 8947 female-headed households were found to be fit for the analysis.

3.1. Model specification

The main purpose of the study was to analyse the determinants of food security amongst female-headed households in South Africa. To achieve the main objective, it employed descriptive statistics, cross-tabulation, and a regression model. To measure the food security status of these households, a Household Dietary Diversity (HDD) score was calculated. Bilinsky and Swindale, (2006) describe the HDD as a qualitative measure of different types of unique foods or food groups consumed by a household over a given reference period (usually 24 hours). This measure has been validated to be a useful approach for measuring household food access, particularly when resources for undertaking such a measurement are scarce. Ibid further described the measure as one of the important indicators of food security for various reasons. One reason why the HDD is preferred is that a more diversified household diet is correlated with caloric and protein adequacy, percentage of protein from animal sources, and household income which measures the dietary intake can be a good proxy for measuring household food security status.

3.2. Calculation of Food security using HDDS

In this paper, the Household dietary diversity score was measured by adding the number of food and food groups consumed by households over 24 hours as a reference period using data from the South African 2018 General Household Data. To measure the HDDS the study adopted the scale formulated by Bilinsky and Swindale (2006). The questions asked in the questionnaire were whether, if and how many times the household had eaten any of the following food groups: cereals, roots, vegetables, fruits, meat, dairy products, eggs, oils, sugar, and pulses. To calculate the food security, all the responses given by the households on the number of times they ate a particular food item were added up, and the HDDS was then used as proxy of food security whereby the higher the diversity score, the more diversified the household, and thus more likely to be food secure.

The study further generated a four category variable to assess how diversified a household is as follows: one indicated severely food insecure; two being moderately food insecure; three being mildly food insecure, and four was food secure.

3.3. Regression model

To assess the determinants of food insecurity among female-headed households an ordinary least square regression model was employed. The household dietary diversity score being the dependent variable was calculated as a continuous variable. Other variables employed as independent variables were income, age, subsidy recipients, involvement in agriculture activities, population group (race), and household size.

The linear regression model is specified as follows:

$$Yi=\beta 0+\beta 1X1i+\beta 2X1i+\beta 3X3i+\cdots\beta nXni\ \varepsilon i\ldots\ldots\ldots\ldots..1$$

Where Y is the outcome variable, β, is the coefficient of the first predictor (Xi), β2 is the coefficient of the second predictor (X2), βn is the coefficient of the nth predictor (Xn) and εi is the difference between the predicted and the observed value of Y for the ith participation Field (2009).

Applying the discussed model, the regression for the study will be as follows,

$$HDDSi = \beta_0 + \beta_1 LOGI_i + \beta_2 HA_i + \beta_3 SR_i + \beta_4 AA_i + \beta_5 PG_i + \beta_6 HS_i + \varepsilon_i$$

Where HDDS is the continuous dependent variable containing all dietary diversity scores employed in the study. And the independent variables described as follows:

Table 1: Variable description

Variable	Description
LOG I	Income of household changed to Log Income
HA	AGE of Household Head
SR	Subsidy recipient (1 receive 0 not receive)
AS	Agriculture activities Involvement (1 involved 0 not)
PG	Population group (1=African/black,2= coloured,3=Indian,4=White)
HS	Household Size

As indicated in Table 1, population group had four categories. In an OLS model or any categorical variable, n-1 dummy variables are needed for a categorical variable with n categories. In this case three dummy variables are used for population group with four categories. Therefore dummy variables were created where the White group was used as a reference point. The dummy variables are defined as follows; $DD1$ dummy variable for African/Black was defined as 1 for Black African and 0 all other values. $DD2$ dummy for Coloured was defined as 1 for Coloured and 0 all other values. $DD3$ dummy variable for Indian was defined as 1 for Indian and 0 all other values. The other categorical variables had two categories which were defined 1 for yes and 0 for no.

4. RESULTS AND DISCUSSION

This section discusses the results of the paper as follows. The first section discusses descriptive results followed by cross-tabulation results and finally the regression results.

4.1. Descriptive results

Table 2: Descriptive analysis results of continuous variables

Variable	*N*	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Household Income	8947	0.00	500000.00	8370.0178	15105.88
Household size	8947	1.00	22.00	3.4037	2.32510
Age head of household	8947	12.00	108.00	48.5570	15.82581
Total	8947				

Table 2 presents descriptive results for all the continuous variables in the study, which shows that with household income the minimum was zero, the maximum 500,000, and the average was 8370; as for household size the minimum was one person in the household and maximum were 22 people in the household. And lastly, age of household head, the youngest head of household was 12 years old and the oldest 108. It is quite shocking to find that a 12-year-old girl can be one taking care of the household, a question which could be asked further is how does she manage to fend for the household since at her age she cannot work.

Table 3: Distribution of head household by province

Province	Number of Households	Percentage
Western Cape	725	8.1
Eastern Cape	1404	15.7
Northern Cape	414	4.6
Free State	551	6.2
KwaZulu-Natal	1632	18.2
North West	578	6.5
Gauteng	1717	19.2
Mpumalanga	735	8.2
Limpopo	1191	13.3
Total	**8947**	**100.0**

Table 3 presents results of the distribution of head of household by province to which they belonged. It shows that the highest number (19%) of the female-headed household is from Gauteng province and the least (4.6%) is Northern Cape. Table 4 describes the female-headed households according to their population group, showing that 87.4% of the female-headed household were African/Black women and the least – 1% were Indian women.

Table 4: Distribution of head household by population group

Population group	Number of households	percentage
African/Black	7820	87.4
Coloured	659	7.4
Indian	89	1.0
White	379	4.2
Total	8947	100.0

Table 5 presents results of the distribution of household head by income categories, showing that the highest-paid White females who by having 53.6 percent are in the 10,001 bracket and above compared to the least in the same category of Black women who have only 15.6 percent. This indicates that even though the White female-headed households were very few within their category, the White women still surpass Black women in terms of their income levels. The question one would ask further is, could it be because these White females are better educated?

Table 5: Distribution of household head by Income categories

Income group	Race				
	African/Black	Coloured	Indian	White	Total
0-2000	28.00%	20.60%	10.10%	7.10%	26.40%
2001-5000	32.80%	34.60%	25.80%	14.20%	32.10%
5001-10000	23.60%	27.60%	27.00%	25.10%	24.00%
10001 above	15.60%	17.10%	37.10%	53.60%	17.50%
Total	100	100	100	100	100

Table 6 presents results of the food security status of female-headed households. As discussed earlier in Methodology HDDS was used as a proxy for the food security status by household and then the food security status was categorised into four categories. In that order it shows that 19% of the female-headed households were severely food insecure; only 6.2 percent were food secure while the rest of the households were in-between.

Table 6: Food security status of female-headed household

HDDS Food security status	Number of households	Percentage
severely food insecure	1696	19.0
moderately food insecure	3417	38.2
mildly food insecure	3276	36.6
food secure	558	6.2
Total	8947	100.0

4.2. Cross tabulation results

Table 6 presents cross tabulation results of the food security status of female-headed households and the province in which they resided. For those that were severely food insecure, the highest percentage was from Free State, being 34.3 percent, while those that were food secure, the highest percentage was from Eastern Cape at 12 percent.

Table 7: Cross tabulation between food security status and province

Province	Severely food insecure	Moderately food insecure	Mildly food insecure	Food secure	Total
Western Cape	13.1%	52.7%	33.1%	1.1%	100
Eastern Cape	14.2%	33.6%	40.1%	12.0%	100
Northern Cape	15.7%	46.9%	34.5%	2.9%	100
Free State	34.3%	29.9%	32.3%	3.4%	100
Kwazulu-Natal	22.3%	38.8%	33.0%	5.9%	100
North West	23.9%	34.6%	38.4%	3.1%	100
Gauteng	13.7%	32.7%	44.1%	9.5%	100
Mpumalanga	21.8%	39.0%	31.7%	7.5%	100
Limpopo	21.0%	43.8%	33.8%	1.4%	100
Total	19.0%	38.2%	36.6%	6.2%	100

Table 8 further describes the food security status of female-headed households by their population group. It shows that the highest percent of female-headed households that were severely food insecure were Black women at 20 percent.

This makes sense because earlier the study indicated that the same Black female group had the lowest income levels and also the largest household size.

Table 8: Cross tabulation between food security status and population group

Population group	severely food insecure	moderately food insecure	mildly food insecure	food secure	total
African/Black	20.1%	38.0%	35.8%	6.0%	100.0%
Coloured	13.2%	43.7%	36.1%	7.0%	100.0%
Indian	2.2%	38.2%	49.4%	10.1%	100.0%
White	8.4%	31.9%	50.4%	9.2%	100.0%
Total	19.0%	38.2%	36.6%	6.2%	100.0%

4.3. Regression results on determinants of food security in Female-headed household

This section presents regression results after testing for fitness of the model, showing F statistics was significant at 1%, and the R^2 was 0.36, meaning that the independent variables explains 36 percent of the variability of the dependent variable acceptable in social economics (Field, 2009). Collinearity diagnostics of the model shows an average VIF of 1.5 confirming that collinearity is negative (average VIF value near 1). Tolerance values in the model were all above 0.2 and no VIF values were greater than 10.

Table 9: Regression results of determinants of food security status amongst female-headed households

Model	B	Std.Error	B	T	Sig
Constant	13.966	0.896		15.589	0.000
Log-income	1.350	0.193	0.052	6.985	0.000*
Head Age	1.842	.186	.069	9.878	.000*
Sub.receive	-0.072	0.656	-0.001	-0.109	0.913
Agriculture activities	1.127	0.608	0.013	1.852	0.064***
Pop group Black	-1.782	0.934	-0.019	-1.909	0.050**
Pop group Coloured	-2.068	1.234	-0.016	-1.774	.094***
Pop group Indian	-0.140	1.897	-0.001	-0.0074	0.706
Household Size	0.241	0.104	0.016	2.326	0.020**

***Significant at 1%, **significant at 5% and *** significant at 10%.**

F value sig 1%

R^2=0.36

Table 9 shows the results of the linear regression model. The first independent variable was income to make income usable in the model, converted to natural logs. In this case, income was denoted as log income, and the results indicated in the table shows that income had a positive coefficient value of 1.350 significant at 1%, meaning higher income increased the HDDS, which results in being food secure. The results are in line to what the study found in section 4.2, where female-headed households that had lower income levels were found to be relatively food insecure compared to their counterparts with higher income levels. The second variable was age of household head (p-value 0.000 and beta=.842), which shows that age was a positive predictor of food security whereby households with older mothers had a better chance of being food secure, which could be because in this study there are some households with mothers or household heads below the age of 18. As such, they cannot potentially fend for families due to other restrictions compared to older women who can work. Agricultural activities was the third variable found to be significant at 10% with a coefficient of 1.127, meaning that being involved in agricultural activities increased the probability of being food secure. This could be that because of being involved in agriculture the household could produce food for themselves and hence improve dietary diversity.

The sixth independent variable was population group, which had four categories: Black African, Coloured, Indian, and White. In this case, White was used as a reference point. The results show that Black African had a negative coefficient of -1.78 significant at 5% meaning that Black women scored less on the HDDS score compared to White women. This means that Black women households were more likely to be food insecure than those with a White female head. The other group were Coloured women, which had a negative coefficient of -2.068 significant at 10%, meaning that Coloured female households scored less on the HDDs compared to the White female household, which also implied that household headed by a Coloured female were more likely to be secure compared to their White counterparts. Indian female-headed households were not significant, hence were omitted; this could be because their representation in the sample was very small. The last independent variable was household size, the coefficient being 0.241 in the model, which is a positive value, indicating that any additional person in the households increases the dietary diversity and also increased the probability of food security. This is contrary to expectations as households with more people are more likely to be at risk of insecurity. However, this may be explained by the fact that the more people in the household, the more the contribution, especially if they are mostly of working age.

5. CONCLUSION

The main objective of the study was to analyse the determinants of food security among the female-headed household in South Africa. In order to achieve this, it employed the general household data of 2018. Only female-headed households were selected. In the analysis, descriptives analysis, cross-tabulation and a regression model were employed to achieve the main objective. Descriptives analysis results indicated that a total of 9847 households were selected, out of which the highest percent came from the African/Black population group (87%) and the least were from Indian population group at 1%. Results from analysing the female-headed household according to income levels within the population groups results showed that 50% of White female-headed households earned more than 10,000 Rand a month, which was the highest compared to the other races. The same results applied to the food security status of households where White women were found to be better off in terms of their food security status. Finally, in the regression results on the determinants of food security in female-headed households from the selected variables, income, age, agriculture activities, household size and population group were found to be determinants of food security status of female-headed households. In terms of income, it showed that households with less income had a higher probability of being food insecure.

Households that were involved in agricultural activities had a higher chance of being food secure, which showed also in the population group. It showed that households with a White female head of the household were better off than the other population groups. The results on grant recipients were found not to be significant, hence no interpretation was made towards this variable. The study further found that households from Black female-headed households were more likely to be food insecure compared to White female-headed households.

The study recommends policymakers on job creation and improvement of skills in Black female-headed households. Policymakers should also pay more attention to girls' education as they are the future mothers; they should make sure that no girl child should drop out of school under any circumstances. This can be done by providing more education bursaries to needy girls. Policymakers should also put into place programmes that would help women establish other means of making money, for example, entrepreneurship skills to help fend for their families by giving these women monetary capital to establish businesses instead of relying on subsidies from the government.

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Annexure 1

number	African/Black	Coloured	Indian	White
1 to 3	52.0%	49.5%	69.7%	89.2%
4 to 6	35.0%	39.9%	28.1%	10.6%
7 above	13.0%	10.6%	2.2%	0.3%
	100.0%	100.0%	100.0%	100.0%

THE INFLUENCE OF INFORMATION HEURISTICS IN DETERMINING THE EVALUATION OF MICROBLOG MUSIC REVIEW CREDIBILITY

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─Abstract─

The inherent fears about the credibility of digital media, stemming from the fact that there are few standards of quality control, exacerbate potential problems regarding the reliability of electronic word of mouth (eWOM). The primary objective for this study was to investigate the influence of credibility heuristics when applied during the evaluation of eWOM communication about music content generated by microbloggers. A mono-quantitative research strategy was applied, whereby, hypotheses testing was consummated from a cross-sectional sample of 485 participants (microbloggers) based in five major towns of the southern Gauteng region in South Africa. A paper and pencil-based questionnaire was administered. Six factors were drawn by applying an exploratory factor analysis procedure. Mono-method bias was checked and the reliability and validity of the study were confirmed. The hypotheses testing comprised the estimation of a multiple regression model. The findings established the predictive power of four heuristics that pose a statistically significant influence on consumers' evaluation of eWOM credibility. The findings point to the import in applying information heuristics in evaluating microblog reviews about music, a low-involvement product. The findings could assist both microblog administrators

and marketing communication practitioners to better design the platforms to facilitate reader credibility evaluations regarding a broader product portfolio.

Key Words: Credibility, Heuristics, Microblogs and music reviews.

JEL Classification: M31

1. INTRODUCTION

According to Schiffman et al. (2014), the marketing communication process commences with either a formal or an informal source encoding a marketing message with words, symbols or gestures. In the case of microblogging, consumers post information on various topics (Jin & Liu, 2010:431). Participants have a public profile where they post short messages or comments using text or other multi-media content, frequently update and re-post content on various issues, which are then broadcast publicly. Some of the microblog platforms that consumers are privy to include Twitter™, Jaiku™, 12Seconds™, Dailybooth™, Tumblr™, FriendFeed™ and Plurk™ (Shu, 2014), among which Twitter™ is the most preferred microblog platform, globally. A favourable trend towards microblogging has been noted in South Africa and the BlueMagnet media report (2016) points to the growth of Twitter™ users in South Africa, ranging between 1.1 million and 7.7 million users in the period 2012 to 2016.

While the universal adoption of digital medium is welcome, the technology brings a myriad of challenges for online users. First, there is an unprecedented increase in the amount of easily-accessible information on the Web (Moran & Muzellec, 2017). Consequent to the increased information abundance that comes about from digital media is the difficulty of finding the most reliable information to meet one's needs from among the multiple microblog platforms. Secondly, fears about the credibility of digital media environment also stem from the fact that there are few standards for quality control and evaluation online (Metzger & Flanagan, 2013). This implies information can be readily changed or misrepresented, while digital data pliability exacerbates additional data reliability issues. Finally, online information lacks traditional authority indicators such as author identity or reputation markers (Metzger & Flanagin, 2013). In some cases, information about the source of information is unavailable, masked or missing from the microblog platform. In other cases, source information is re-purposed from one platform to another, thereby creating concerns and uncertainty regarding who is responsible for creating the microblog content and whether it should be believed and/or considered credible.

2. RATIONALE FOR THE STUDY

Moran and Muzellec (2017) mention that consumers are reluctant to adopt eWOM because it is not easy for them to ascertain the level of credibility, which is the focus of this article. Likewise, Cheung et al. (2009) make audible appeals for increased investigations on the way consumers evaluate the credibility of online reviews. Therefore, this study seeks to evaluate the extent to which cognitive heuristics can be instrumental cues for evaluating the credibility of eWOM communication proffered through microblog music reviews.

3. LITERATURE REVIEW AND HYPOTHESES

Consumer behavioural theorists such as Schiffman et al., (2014:214) maintain that in instances where a consumer's assessment skills are low, learning and attitude changes tend to occur through the peripheral route, to the exclusion of evaluating information relevant to the attitude object itself. Drawing from Fogg's (2003:15) contention that "peripheral cues is the rule of web use", it can be emphasised that consumers rely on verification strategies that require the least amount of effort to perform. Termed cognitive heuristics, these strategies ignore conventional information processing routes and instead, apply minimal cognitive load and time to process information (Gigerenzer & Todd, 1999; Metzger & Flanagin, 2013). The heuristics are not mutually exclusive but instead, can be combined, re-combined or nested during the evaluation process. This study is premised on Metzger, Flanagin and Medders' (2010) five credibility heuristics, which are instrumental in exerting a significant influence on eWOM credibility. The five heuristics are discussed next.

3.1. Reputation heuristic

This heuristic is rooted in a basic heuristic principle of favouring recognised sources of information whose names are easily recognisable, even without having thoroughly inspected the actual content or the source's credentials (Gigerenzer & Todd, 1999). In this respect, familiar sources are often judged more credible than unfamiliar sources, independent of message characteristics such as argument quality (Metzger & Flanagin, 2013). The reputation heuristic can be determined from the authority of the eWOM source, in terms of subject expertise (Sundar, 2008:84). In digital media contexts, the reputation heuristic pertains to name recognition of a Web platform or content author, of which the familiarity lends towards acceptance of the source as a provider of credible information. In light of this, the following hypotheses are proposed:

Ho_1: Source reputation does not have a direct and significant influence on the credibility evaluation of microblog music reviews.

Ha_1: Source reputation has a direct and significant influence on the credibility evaluation of microblog music reviews.

3.2. Expectancy-violation heuristic

The first point of contact when evaluating online information is the web interface. As such, the expectancy-violation heuristic alludes to the quality of the online message and interface, which ultimately determines the persuasive strength of the communicated message (Teng et al., 2014). Most prevalent are the expectancy violations stemming from the "presence of typos or grammatical errors, poor site design, visual appearance, or navigation", all of which result in strong negative credibility evaluation (Metzger & Flanagin, 2010:216). Relatedly, Metzger et al., (2010) shows that some forms of expectancy violations occur when websites ask for more information than necessary or provide more information than is requested by users. Put simply, the decision to continue on a specific platform is dependent on whether or not consumers' expectations are met or violated; in which case, violation can occur through lack of professionalism in the content of microblog posts, profaning online media regulations and not upholding security standards, which would likely lead to negative evaluation of credibility. On the other hand, professional-looking content and smooth site navigation positively impact consumers' credibility evaluation of microblog content. Thus;

Ho_2: Message quality does not have a direct and significant influence on the credibility evaluation of microblog music reviews.

Ha_2: Message quality has a direct and significant influence on the credibility evaluation of microblog music reviews.

3.3. Endorsement heuristic

The endorsement heuristic suggests that people are inclined to believe information and sources if others do so, without much scrutiny of the site content or source (Metzger & Flanagin, 2010). Thus, content evaluation draws upon the level of trust derived from known or unknown participants in the online platforms, yielding the bandwagon effect. In addition, the endorsement heuristic is underpinned by a sense of liking or agreement (Chaiken, 1980), whereby online information is considered credible and yielding persuasive effects if significant groups agree with the content. While bandwagon perceptions are a form of secondary inducement on consumers, this heuristic influences credibility evaluations. For example, Sundar (2008) demonstrated how the manipulation of web content cues such as star ratings and sales rankings significantly influenced

product evaluations and overall purchase intentions of consumers. The endorsement heuristic is invaluable in microblogs since it provides an opportunity for consumers to network in a homophilous fashion with unfamiliar individuals, thereby converging on mutually identified areas of interest. The shared interests and mindsets of microbloggers can be instrumental in enhancing the credibility perceptions of eWOM communication along microblog platforms. Thus, it can be hypothesised that:

Ho_3: Information endorsement does not have a direct and significant influence on the credibility evaluation of microblog music reviews.

Ha_3: Information endorsement has a direct and significant influence on the credibility evaluation of microblog music reviews.

3.4. Consistency heuristic

In eWOM communication along microblogs, consumers are presented with the opportunity to consult various sources of information to expand or validate the messages they are receiving. The consistency heuristic involves making cross-comparisons of online information across web platforms to check the level of agreement with other independent sources. Consumers apply the consistency heuristic when they assume the correctness and credibility of online information based on consensus from multiple web sources or platforms, consistent with Chaiken's (1980) consensus view. The consistency heuristic presents a relatively fast and frugal means of evaluating online information credibility (Metzger & Flanagin, 2013). Information consistency was first introduced as a determinant of eWOM credibility by Cheung et al., (2009), who noted that the consistency of recommendations posted by users of products and services across multiple platforms has a significant influence on other consumers' perceptions of the credibility of an eWOM message. Therefore, inferring from the literature and the empirical evidence, the present study hypothesised that:

Ho_4: Information consistency does not have a direct and significant influence on the credibility evaluation of microblog music reviews.

Ha_4: Information consistency has a direct and significant influence on the credibility evaluation of microblog music reviews.

3.5. Self-confirmation heuristic

Consumers enter the information evaluation process with their own pre-conceived ideas, beliefs and attitudes about certain phenomena. Usually, prior-beliefs are held in the memory of a consumer as a result of direct experience and/or the

indirect experiences of other individuals within the same circle (Luzzani, 2015). The pre-existing beliefs act as a risk-reliever, thereby providing confidence when analysing information. This school of thought is upheld by Metzger et al., (2010:428), who conceive the self-confirmation heuristic as a "tendency for people to view information as credible if it confirms their pre-existing beliefs and not credible if it counters their existing beliefs, regardless of how well-argued, duly researched or appropriately sourced the online information is". Other scholars support the view that Internet users tend to select content that is consistent with their already existing attitudes and opinions (Cheung et al., 2009; Ismagilova et al., 2017). In the case of time-constrained decision making, online users may decide to stop the online search process when they find information that confirms their attitudes and existing beliefs. Whereas the downside is the genesis of a 'false consensus-effect' where online users believe that their own opinions are shared right and widely by others (Metzger & Flanagin, 2013), it is contended that for a low-involvement product (i.e. music), existing beliefs of consumers do in fact provide ready-aids for evaluating the credibility of information. Hence;

Ho_5: Confirmed beliefs do not have a direct and significant influence on the credibility evaluation of microblog music reviews.

Ha_5: Confirmed beliefs have a direct and significant influence on the credibility evaluation of microblog music reviews.

4. METHODOLOGY

A mono-quantitative research strategy was applied, whereby hypotheses testing was consummated by drawing a cross-sectional sample of 485 participants (microbloggers) aged between 18 and 65 years. The sample was based in five major towns of the southern Gauteng region of South Africa, whereas the region displays a microcosm of South Africa due to its urban and cosmopolitan nature. Given the constraint of consumers' privacy rights, a reliable and accurate list of participants could not be obtained, signalling that the study was amenable to non-probability-based sampling procedures. Specifically, convenience sampling was applied as it has been cited as very beneficial, in the absence of a suitable sampling frame (Brown, Suter & Churchill, 2018). In addition, the character elements of convenience sampling seem to appeal to studies bearing severe financial and time constraints such as this study. Likewise, previous studies (Cheung et al., 2009; Luo et al., 2013) have also espoused a convenience sampling procedure.

4.1. Data collection and measuring instrument

While upholding ethical research protocol, a structured questionnaire was administered between July and November 2018. Two distribution points were used to ensure that there was extended reach for the survey, namely a microblog posted link (https://myresearchsurvey.com/MMRC) as well as a paper and pencil-based questionnaire distributed on a pick and drop basis.

The variables under investigation were operationalised from previous studies. Modifications to the scales were made to reflect the study context of microblog music reviews. Source reputation was adapted from Luo et al. (2013), eWOM credibility was gleaned from Durmaz and Yuksel (2017) while message quality was adapted from Lin, Wu and Chen (2013). Information endorsement was adapted from Wu (2013), whereas both review consistency and confirmed prior beliefs were operationalised from Cheung et al. (2009). The scale indicators were affixed to a strongly disagree (1) to strongly agree (5) Likert-scale continuum. The questionnaire included a screening question to ensure that the respondents had made a music review post on a microblog within three months of the survey date.

5. DATA ANALYSIS

Editing checks were conducted to ensure that qualifying criteria were met and double submissions eliminated. Data cleaning yielded 485 usable questionnaires for analysis on Version 25.0 of the Statistical Package for Social Science.

5.1. Sample characteristics

Most of the study participants (n=261; 53.8%) were female. Regarding the population groups, 51.3 percent of respondents were black African (n=249) while only 32.0 percent were White (n=155) and 16.7 percent were Indian/Asian (n=81). In terms of their highest level of education, the respondents had completed either Matric/Grade 12 (n=165; 34%), a Diploma (n=185; 38.1%) or a Bachelor's degree (n=96; 19.8%), denoting that extensive tertiary education is not a pre-requisite for disseminating music content along microblogs. Entertainment was elected as the most preferred content on microblogs (n=224; 46.2%), of which music is a part.

5.2. Exploratory factor analysis (EFA)

To reduce the dimensionality of the data and evaluate the construct validity of the measurement scales, EFA was performed (Field, 2013; Hair et al., 2018). The large and significant Chi Square value on the Bartlett's test statistic (2394.316; DF=231; $p < 0.05$) and a Kaiser-Meyer's Olkin value reported above 0.50

(KMO=0.809) provide adequate evidence of meritorious data for factorability (Hair et al., 2018). Measures of sampling adequacy (MSA) were computed for each variable (ranging between 0.738 and 0.939), pointing to a sufficiently large sample size. Absence of common method bias was ascertained when the unrotated EFA yielded only 23.17 percent of variance (below 50%) on the singular factor that was extracted.

In the final EFA, no restriction was placed on the number of factors to be extracted. Instead, the Eigen values 'greater than one criteria' (Malhotra et al., 2017) were applied. Secondly, for meaningful results, the cumulative percentage of variance should be in excess of 60 percent (Hair et al., 2018). The first factor to be extracted after Varimax rotation yielded a 26.165 percentage of variance, demonstrating that no single factor in the model was domineering. The cumulative percentage of variance in this work was 70.5 percent upon extraction of six factors, namely message quality, eWOM credibility evaluation, information endorsement, source reputation, information consistency and confirmed beliefs (Table 1).

Table 1: Rotated component matrix

Components							**Validity and reliability**		
Items	**MQ**	**CE**	**IE**	**SR**	**IC**	**CB**	**COMM**	**ITTC**	**MSA**
C1	0.194	0.113	0.170	0.531	0.047	0.375	0.491	0.427	0.939
C2*	0.281	0.247	0.010	0.102	0.398	0.294	0.319	0.372	0.809
C3	0.209	0.007	0.106	0.599	0.018	0.020	0.415	0.406	0.897
C4	0.144	0.018	0.312	0.608	0.038	0.038	0.490	0.460	0.901
C5	0.064	0.019	0.132	0.668	0.191	0.048	0.506	0.411	0.903
C6	0.156	0.236	0.024	0.587	0.202	0.011	0.411	0.489	0.871
C7	0.525	0.157	0.224	0.097	0.208	0.253	0.478	0.479	0.896
C8	0.702	0.103	0.104	0.086	0.028	0.158	0.605	0.514	0.841
C9	0.678	0.107	0.093	0.044	0.203	0.015	0.462	0.484	0.882
C10*	0.181	0.212	0.032	0.117	0.156	0.235	0.367	0.436	0.810
C11	0.568	0.272	0.015	0.175	0.166	0.312	0.513	0.474	0.905
C12	0.626	0.159	0.142	0.209	0.039	0.049	0.497	0.464	0.903
C13	0.038	0.118	0.543	0.328	0.062	0.266	0.444	0.477	0.923

C14	0.098	0.173	0.749	0.159	0.044	0.085	0.465	0.543	0.899
C15	0.133	0.237	0.650	0.105	0.102	0.021	0.590	0.449	0.908
C16	0.073	0.105	0.648	0.147	0.182	0.182	0.606	0.525	0.917
C17	0.158	0.276	0.609	0.060	0.028	0.123	0.478	0.513	0.881
C18	0.141	0.002	0.313	0.020	0.566	0.073	0.569	0.544	0.919
C19	0.073	0.177	0.135	0.205	0.610	0.164	0.617	0.571	0.910
C20	0.083	0.222	0.057	0.198	0.717	0.162	0.443	0.535	0.887
C21*	0.479	0.162	0.067	0.140	0.426	0.414	0.334	0.346	0.883
C22	0.230	0.054	0.261	0.082	0.123	0.653	0.537	0.465	0.859
C23	0.292	0.111	0.253	0.019	0.276	0.625	0.511	0.465	0.825
C24*	0.345	0.277	0.157	0.525	0.510	0.064	0.297	0.260	0.738
C25*	0.009	0.345	0.055	0.548	0.517	0.162	0.314	0.313	0.816
C26	0.115	0.604	0.266	0.312	0.278	0.287	0.413	0.493	0.914
C27	0.302	0.718	0.022	0.007	0.103	0.307	0.530	0.560	0.897
C28	0.128	0.720	0.007	0.206	0.078	0.106	0.553	0.590	0.901
C29	0.250	0.733	0.243	0.185	0.274	0.285	0.564	0.591	0.894
C30	0.102	0.667	0.302	0.009	0.189	0.254	0.482	0.530	0.903
Eigen value	**5.756**	**2.647**	**1.647**	**1.337**	**1.169**	**1.013**			
% of variance	**26.165**	**17.445**	**10.873**	**6.077**	**5.314**	**4.608**			

MQ=Message quality; CE=Credibility evaluation; IE=Information endorsement; SR=Source reputation; IC=Information consistency; CB=Confirmed beliefs; Comm=Communalities; ITTC=Item to total correlations

Most of the items aligned as expected with their respective factors. However, there are fundamental thresholds that were observed in the EFA to purify the scale. First, each variable loading should be above 0.50, preferably above 0.70 to be considered significant and valid (Malhotra et al., 2017). Secondly, items with loading below 0.50 or cross-loading items should be deleted. Thirdly, items returning weak item-to-total correlations and/or communality values should be rejected as they demonstrate weak association with other items on the measurement scale (Field, 2013). In this research, variable C2 (*music reviews are rated highly*) and C10 (*music reviews are useful*) were deleted based on weak and insignificant factor loadings (below 0.50), low communalities (below 0.40) as well as poor correlated item-to-total correlation coefficients (below 0.40).

Likewise, variable C21 (*music reviews support my impressions*), C24 (*music reviews resonate with previous expectations*) and C25 (*music reviews reinforce previous knowledge*) also yielded weak communalities and loadings, while seemingly loading over multiple factors, simultaneously making it difficult to discriminate the variables with accuracy. Consequent to this criteria evaluation, the five variables (C2, C10, C21, C24 and C25) where excluded from the inferential analysis since they did not measure at least 50 percent of the variance in the respective constructs they were representing.

5.3. Reliability and validity

Cronbach's alpha test results ranged between 0.686 and 0.898, which is above the 0.70 benchmark for acceptable *internal-consistency reliability* (Field, 2013), save for the factor confirmed beliefs, which was slightly below 0.70; it was retained in this research based on Babin and Zikmund's (2016) lenient benchmark that Cronbach's alpha coefficients between 0.60 and 0.70 infer "fair reliability". *Face validity* was assessed by two online consumer behaviour experts who evaluated linguistic errors and possible misrepresentation of wording in the questionnaire. *Content validity* was confirmed by the fair results from a preliminary pilot study with 62 students from a university (α = 0.604 to 0.811), denoting that representative questions were included in the survey. As an indicator of *convergent validity*, the significant loadings (0.531 to 0.749), strong communalities (0.411 to 0.617) and item-to-total correlations (0.406 to 0.591) inferred a large variance captured by each of the 25 variables accepted for analysis. In terms of *discriminant validity*, all the correlation coefficients of this study fell below 0.70, thereby confirming the theoretical uniqueness of each identified factor in this research (Field, 2013). Predictive validity was assessed by estimating a multiple regression model concurrently with the hypothesis testing.

5.4. Regression analysis

Since only positive correlations existed between eWOM credibility evaluation (dependent variable) and the five cognitive heuristics (independent variables), it was necessary to estimate a multiple regression model to establish the strength of the predictive relationships among the variables.

5.4.1. Data requirements and assumptions of regression

A sample comprising 485 valid cases was considered sufficiently representative, consistent with Tabachnick and Fidell (2012:613) who posited that "if multivariate statistics like EFA and regression analysis are to be applied it is comforting to have 300 or more cases". In a later study, the scholars proposed a

sample size of 50 plus eight times the number of independent variables (50 + [8*5 independent variables] =90), of which 485 cases exceeded the minimum requirements.

The SPSS functionality was computed to check the assumptions of regression. First, the test for linearity was satisfied upon observing the positive and statistically significant correlation coefficients reported in this work ($+0.303 \leq r \leq +0.544$, $p < 0.05$ level). Furthermore, after plotting the independent variables against eWOM credibility evaluation on a scatter plot, absence of curvilinearity was evident since the scores were concentrated in the middle, tangential to the zero-point. Secondly, the bell-shaped histogram provided visual evidence for verifying data. Statistically, the standardised residuals on the probability plots (-2.238 to +2.898) did not exceed the absolute values of ±3 range (Field, 2013), denoting constant variance and a zero mean for the error terms of the heuristics. The skewness (-0.153 and -0.494) and kurtosis (+0.432 and +0.067) values were within the ±2 threshold, further corroborating the normally-distributed data in this research (Hair et al., 2018).

Thirdly, the diagonal lines on the P-P plots of standardised residuals provided a tell-tale pattern that as the independent variable increases, so does the variance of the residuals, denoting that the data were homoscedastic. In fact, the Mahalanobis distance calculated was 7.46, with the highest Cook's distance of 0.086 (below 1), suggesting that no disturbing outliers were present (Tabachnick & Fidell, 2012). Fourthly, Durbin-Watson' test statistic was 1.924, which is within the 1.5 and 2.5 range, signalling the absence of autocorrelation. Finally, colinearity problems were presumed absent in this research since the tolerance values (0.675 to 0.798) were greater than 0.1 and the reported VIF values (1.254 to 1.480) did not exceed 10.0 (Field, 2013). Other collinearity diagnostics included verifying that the condition index values for each independent variable are below 30 (10.676 to 15.736), while the returned eigen values (0.025 and 5.832) and variance proportions (0.01 to 0.48) were above 0.01, implying the data were beyond the point at which colinearity begins to affect statistical estimates awkwardly (Tabachnick & Fidell, 2012).

5.4.2. Fit of the regression model

The adjusted R-square (Adj. $R^2 = 0.433$) denotes that 43 percent of the variation in microbloggers' evaluation of eWOM credibility is explained by the heuristics identified in this work. Upon fitting the regression model, the F-statistic gives evidence of a significant relationship between the independent variables with the dependent variable ($F=74.950$; mean square=27.729; $df = 3$; $p < 0.01$).

5.4.3. Hypotheses testing and the effects of predictor variables

To assess the size of the effects of each independent variable on the dependent variable, the regression coefficients were evaluated (Table 2). The beta coefficients in Table 3 indicate that four of the five heuristics, namely source reputation, message quality, information endorsement and confirmed beliefs contribute significantly to the prediction of eWOM credibility.

Table 2: Regression coefficients for the model

	Unstandardised coefficients		**Standardised coefficients**			**Decision**
	B	**Standard error term**	**Beta**	**T**	**Sig.**	
(Constant)	0.429	0.162		2.646	0.008	
Source reputation	0.212	0.044	0.198	4.780	0.000	Reject H_o1 Accept H_a1
Message quality	0.306	0.041	0.307	7.506	0.000	Reject H_o2 Accept H_a2
Information endorsement	0.150	0.041	0.154	3.688	0.000	Reject H_o3 Accept H_a3
Information consistency	0.057	0.040	0.058	1.449	0.148	Fail to reject H_o4
Confirmed beliefs	0.153	0.031	0.191	4.992	0.000	Reject H_o5 Accept H_a5

6. DISCUSSION

The results of this study prove that the reputation of the microblog reviewer does indeed influence consumers' evaluation of eWOM credibility as depicted by the second highest Beta regression coefficient in the regression model (β = +0.198; t-value = 4.780; $p < 0.01$). Therefore, H_o1 is accepted while H_o1 is rejected in this study. The results are consistent with the findings of Cheung et al., (2009) who also found a statistically significant influence of the reputation of the source of an online recommendation about products on the credibility judgements of consumers. The second hypotheses aimed at testing whether message quality was a significant predictor of positive eWOM credibility evaluations. Interestingly, the statistically significant result along this regression path indicated that among the five heuristics, the quality of the message content yields the strongest cue effect on consumers' overall judgements about the credibility of microblog eWOM communication about music (β=+0.307; t=7.506; $p < 0.01$). This empirical result provided adequate support for H_a2, while H_o2 was rejected in this research.

The third hypothesis proposed the existence of an influential relationship between information endorsement and positive credibility evaluation of music reviews posted on microblogs. The empirical results of this work supported H_a3, while H_o3 was rejected ($\beta = +0.154$; t-value = 3.688; $p < 0.01$). Microbloggers who participated in this research purported to judge music-related posts based on whether they were sanctioned by homophilous others, such as peers, family, colleagues and fellow microbloggers. Notwithstanding the weak predictive effect of information endorsement on credibility evaluations, the statistically significant result provides sufficient evidence of the importance of this variable. In fact, the result of this study is consistent with Shamhuyenhanzva et al., (2016), who reviewed the influence of homophily on South African consumers of fast food products, another low-involvement product. Thus, it can be concluded that endorsement of information by homophilous parties is a vital component in the credibility evaluations of South African consumers.

Regrettably, the empirical results of this work did not yield sufficient evidence to infer a predictive relationship between information consistency and credibility evaluations of microblog music reviews ($\beta = 0.058$; t-value = 1.449; $p = 0.148$). In this regard, the hypothesis H_o4 could not be rejected in this research. Notably, this result is contrary to previous research (e.g. Cheung et al., 2009). Thus, there is insufficient evidence in this research to conclude that the consistency of reviews across social media platforms is a legible heuristic that is applied by consumers when evaluating the credibility of music reviews. Finally, with respect to the fifth hypothesis, sufficient evidence exists for a positive and statistically significant relationship between confirmed beliefs and the evaluation of eWOM credibility of microblog music reviews ($\beta = +0.191$; t-value = 4.992; $p < 0.01$). Consequently, H_o5 is rejected, whereas H_a5 is supported in this work. Thus, consumers are likely to perceive microblog music posts in a positive light if they confirm the beliefs they previously held or if the online content confirms that which consumers already know. Notably, Ismagilova et al.'s (2017) work guides researchers towards proving this predictive effect across samples and contexts.

7. IMPLICATIONS OF THE STUDY

The results of this study are relevant in that they could advance the work by microblog administrators by profiling consumers along the four heuristics such that unique and segmented design platforms are created by online marketing communication practitioners that facilitate the evaluation of the credibility of online information that is posted about a variety of products.

8. CONCLUSION AND FUTURE RESEARCH

This research adds to the knowledge base by testing a cohort of heuristics that are considered when evaluating the credibility of microblog music reviews. From the results, it is noted that positive evaluation response is an outcome of secondary inducements from four heuristics, namely the reputation of the online content source (*source reputation*), endorsement of the online content by homophilous others (*information endorsement*), quality of the posted content in terms of professionalism and content accuracy (*message quality*) as well as resonance of the music reviews with previously held attitudes and beliefs (*confirmed beliefs*). While these four heuristics only explain about 43 percent of the credibility evaluation process, the remaining 57 percent could possibly be a result of other cues that are not mentioned in the heuristics' theory, including central cues, pointing to the potential dual-effect of both central and peripheral cues when evaluating eWOM communication about low-involvement products. This dual perspective presents fertile ground for future research.

In light of the unsupported predictive effect between information consistency and the evaluation of eWOM credibility, it should be noted that posts made along microblogs may be reviewed by a large number of customers with diverse backgrounds. Therefore, influences such as culture, personality, perceptions and preferences for music genres and music producers could actually play a leading role in shaping the ultimate evaluation of the credibility of microblog music content, rather than the consistency of music posts across platforms.

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'ARE THEY TRULY OUR FRIENDS?' A PRELIMINARY EVALUATION OF UNIVERSITY STUDENTS' CONFIDENCE IN THE POLICE

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─Abstract─

Citizens' confidence in the police is a fundamental requirement for effective policing in modern societies. While this argument holds true for most legal and criminological perceptions in South Africa, research studies have hardly considered how specific segments of the population, particularly university students, view the police. This study was therefore aimed at determining the extent to which university students' perception of the police shaped their confidence in the South African Police Service (SAPS) as an institution. A quantitative approach was adopted for the study. Data were obtained from participants through a convenience sampling technique. A sample of 682 participants was drawn from one of the largest universities in South Africa for a cross-sectional survey. The data were used to assess whether students' personal encounters with or vicarious knowledge of the police influenced their confidence in the procedural fairness, effectiveness and trustworthiness of the members of this institution. It was found, amongst others, that the students did not have a favourable disposition towards the police and that this negative attitude reduced their confidence in the police. Students' negative perceptions were shaped by their personal experiences of police corruption and brutality and this diminished their trust in the police. Increased levels of fear due to escalating crime also had a

negative impact on their confidence in the SAPS. The implications of these findings for policing in contemporary South Africa are disconcerting, and the study thus confirms that the police-student relationship in South Africa needs to improve. For example, the police should adopt more proactive methods and a conciliatory approach when engaging with students while carrying out their constitutional responsibilities, whereas students, without breaking the law, should adopt a more permissive approach when making their voice heard.

KeyWords: university, students, police, confidence, South Africa,

JEL Classification: L84

1. INTRODUCTION

The police play an important role in society as they are charged with the responsibility of protecting lives and property. They are also expected to assist the public in order maintenance and crime control by ensuring that there is compliance with societal established norms (Murphy, 2015; Walker & Katz, 2012; Sunshine & Tyler, 2003). To be efficient in executing their duties, the police often rely on the cooperation of the public. However, such cooperation cannot be achieved with brute force, but requires collaboration and mutual respect between the police and the public. While the public is expected to report any suspicious activity or incidences of crime and victimisation to the police, the latter is expected to be effective in the execution their duties (Walker & Katz, 2012). Moreover, the police are expected to respect people's rights and adopt methods that are fair in order to elicit public support.

Because police-public cooperation is pivotal in achieving a crime-controlled society, it is imperative to understand the nature, extent of, and motivations that will drive cooperation. While studies have investigated why people cooperate with the police in developed countries (e.g., the United Kingdom, United States of America, Australia and Canada), little is known about cooperation with and attitudes towards the police in transitional African societies. The few studies on this topic that were conducted in Africa focused on the general population (Boateng, 2013; Tankebe, 2013; Tankebe, 2010), with little consideration for specific segments of society. While the findings of these studies are important in measuring the extent of public cooperation with the police, there is a need to consider the views of specific segments of the population, with particular reference to university students who have historically been volatile in raising their voice against perceived political and societal injustices. The rationale for the study was the need to establish whether university students – who may later become

policy makers, technocrats or academics − have a sound understanding of the dynamics of policing in contemporary times. More especially, the significance of these citizens' cooperation with the police in combating crime in society needed to be explored.

Similar to experiences in most transitional African societies, police officers in South Africa face significant challenges that require the voluntary cooperation of the youth, especially university students (Bello & Steyn, 2019). However, conflict and animosity often discourage students from supporting the police during crime control operations, and this sustained strained relationship has the propensity to exacerbate university students' assessment of the police (Bello & Steyn, 2019).

Against this backdrop, the study utilized data collected from a sample of 682 students at one of the largest universities in South Africa to explore their perceptions of the police and how these perceptions influenced their confidence in and respect for members of the SAPS. The study also attempted to determine whether students' perceptions could eventually shape their willingness to cooperate with the police in order maintenance and crime control.

2. LITERATURE REVIEW

2.1. Policing and students' attitudes in South Africa

The relationship between the police and a majority of university students has inarguably been excessively troublesome in South Africa in recent times (Bello & Steyn, 2019). There is broad consensus that, even in developed Western countries, the police-student relationship has been characterised by conflict and confrontation and that this has resulted in low ratings of the police by students (Murphy, 2015; Hurst & Frank, 2000). Most university students are young and opinionated, and many are thus more amenable to violent behaviours, crime and victimisation to achieve political/societal goals than adults (Murphy, 2015). Students are often implicated in acts that contravene the law such as flouting traffic rules, engaging in alcohol and drug abuse, sexual violence, and public disturbances (Australian Institute of Criminology, 2008; Murphy, 2015).

Given the fact that students tend to congregate in public places for demonstrations or protests against poor service delivery, or to vent their frustrations on university management and the State over unfulfilled promises, they are likely to attract police attention (Australian Institute of Criminology, 2008; Murphy, 2015). Such protest actions also recently pitted students against the police in South Africa, especially when they breached the law and constituted a threat to public order and security. Police actions to contain student demonstrations and protest actions have

often portrayed them as antagonists, even when they were deployed to protect lives and property (Murphy, 2015). These encounters generally sullied the police-student relationship and ultimately engendered pessimistic and biased opinions about the police among students (Noorman, 2009). For instance, university students' low level of confidence in the police may be linked to their experiences during recent 'fees must fall' protest actions (Lange, 2017). These protests exacerbated the conflict between SAPS officers and university students as the police sometimes fired teargas and rubber bullets to disperse student protesters even when the protests were seemingly peaceful (Bello & Steyn, 2019; Lange, 2017). This provocative police response often aggravated the situation and often caused peaceful protest actions to erupt into full-scale student-police face-offs (Bello & Steyn, 2019). The SAPS is therefore faced with the task and repsonsibilty to adopt more proactive and effective strategies in order to foster a healthy and mutually supportive police-student relationship.

2.2. Procedural justice and cooperation with the police

The importance of procedural justice in shaping the public's willingness to cooperate with the police has been extensively explored in legal-criminological literature (Jackson & Sunshine, 2007; Sunshine & Tyler, 2003). Broadly speaking, procedural justice is concerned with the fairness of the procedures adopted by the police when making decisions that affect people who have direct or indirect contact with them. Studies on procedural justice have opined that citizens are more likely to cooperate with or defer to the police when they perceive police procedures and attitude to be fair (Tyler & Murphy, 2011; Reisig & Lloyd, 2009). Public opinion is also formed and judgement of the decisions of the police are influenced when people experience or have vicarious knowledge of how the police treat people (Boateng, 2016). Citizens are thus more likely to cooperate with or defer to the police when they perceive the judgement of the police to be fair and respectful. It is noteworthy that studies have shown that citizens' willingness to cooperate with the police is determined by their perception of the procedural fairness of the police rather than by other variables such as police effectiveness and performance (Akinlabi, 2017; Boateng, 2016).

According to Murphy (2015) and Tyler (2003), the significance of procedural justice lies not only in fostering public compliance with the law, but it also increases the perceived legitimacy of police actions and authority. Tyler (2004) refers to four fundamental characteristics identified in empirical criminological studies that shape citizens' assessment of the fairness of procedural justice. The first is the extent to which citizens can *participate* in the process of explaining and

giving their account of any situation to police officers (Tyler, 2004). The second is shaped by individuals' assessment of the *neutrality* of police officers in a situation; thus whether the police are objective and fair in the decisions they make and whether all parties are treated equally (Tyler, 2004; Herbert, 2006). Thirdly, citizens expect police officers to treat them with *respect*. Thus people's rights should be respected and they should be approached by the police in an appropriate manner. Finally, the procedures followed by the police should be fair, as only then will citizens trust or have confidence in the motives of the police and the decisions they make. Citizens should thus experience legal authorities as *caring* (Tyler, 2004; Murphy, Murphy & Mearns, 2010; Jacobsen, 2015).

Studies have shown that citizens' experiences of police corruption erode confidence in them (Olutola, 2014; Akinlabi, 2017; Faull, 2007). When police officers demand or accept bribes or kick-backs from citizens who violated the law in order to evade arrest, it diminishes the respect that citizens should ordinarily accord the police. It has thus been argued that the public's experiences and knowledge of police corruption are prominent factors that engender lack of confidence in the police (Tankebe, 2009).

The current study intended to corroborate (or refute) the literature on public perceptions of the police by exploring similar drivers of negative perceptions among the students of a selected university in South Africa. A particular interest was to establish whether university students in the transitional South African society harboured a sense of confidence in the police and to determine which factors, if any, shaped their confidence.

3. METHODOLOGY

3.1. Participant selection for data collection

The data were collected by means of a cross-sectional survey of 682 student participants from the University of KwaZulu-Natal in Durban, South Africa. The sample was drawn from three campuses that were randomly selected from the six campuses of the university. Convenience sampling at the selected campuses was utilised.

In order to recruit participants for this study, permission was obtained from the university's Ethical Committee and from lecturers teaching specific modules in various lecture theatres. After approval had been granted, the researcher and his assistants arrived at the lecture venues to administer the survey questionnaire. After the researcher and his team had introduced themselves and conveyed the purpose of the study, consent forms indicating voluntary participation, anonymity

and confidentiality were explained and distributed. A total of 750 questionnaires were issued but 682 students participated voluntarily and completed and returned the questionnaires.

3.2. Measurements for data analysis

Excluding the demographic items, the survey posed a total of 30 questions. With the exception one variable, all the key scales described below were measured on a 5-point (1 = strongly disagree to 5 = strongly agree) Likert scale. An explanation of the variables and the mean values and standard deviations is presented below.

3.2.1. Dependent variables

This study had three dependent variables. These variables measured different aspects of the respondents' perceptions of the police, namely trust in the police, police effectiveness, and police procedural fairness.

Trustworthiness

The respondents' trust in the police was measured on an addictive scale of five items using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Ascending scores indicated an increasingly positive perception of police trustworthiness. The results were: a Cronbach alpha of $\alpha = 0.74$; mean = 13.77; and SD = 3.62.

Police effectiveness

The police effectiveness variable assessed the respondents' perceptions of the extent to which the police are able to achieve their constitutional responsibilities. It was measured using a five-item scale adopted from Tyler (2006) and recorded according to a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Ascending scores indicated an increasingly positive perception of police effectiveness. The results were: a Cronbach alpha of $\alpha = 0.78$; mean = 13.17; and SD = 3.98.

Procedural fairness

University students' perception of the procedural fairness of the police was assessed using a seven-item scale adapted from Tyler (2006), Tankebe (2009) and Murphy et al. (2010). It was measured on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Ascending scores indicated an increasingly positive perception of police procedural fairness. The results were: a Cronbach alpha of $\alpha = 0.84$; mean = 19.34; and SD = 4.97.

3.2.2 Independent variables

The effects of the dependent variables referred to above were tested on the independent variables, namely experiences of police corruption (personal and vicarious), fear of crime, and demographic features.

Police corruption (personal experiences)

Personal experiences of police corruption were measured using a three-item scale. The items were premised on the assumption that students' personal experiences of police corruption shaped their confidence in the police. The instrument was adapted from Tankebe (2010) and Sunshine and Tyler (2003). The responses were measured using a 5-point Likert scale (1 = not at all to 5 = almost always). The results were: a Cronbach alpha of $\alpha = 0.88$; mean = 6.92; and SD = 3.28.

Police corruption (vicarious experiences)

The participants' vicarious knowledge of police corruption were measured using a three-item scale to determine if this knowledge impacted their confidence in the police. The instrument was adapted from Boateng (2016), Tankebe (2010) and Sunshine and Tyler (2003). Responses were recorded according to a 5-point Likert scale (1 = not at all to 5 = almost always). The results were: a Cronbach alpha of $\alpha = 0.88$; mean = 7.01; and SD = 3.36.

Fear of crime

Students' fear of crime in their neighbourhood was measured using a five-item scale. The items measured whether the students' perception of safety and security in their neighbourhoods shaped their confidence in the police. The instrument was adapted from Boateng (2016) and the responses were measured on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The results were: a Cronbach alpha of $\alpha = 0.79$; mean = 12.79; and SD = 4.33

4. RESULTS

4.1. University students' perceptions of and confidence in the police

The main aim of this study was to determine the extent to which university students' perceptions of the police shaped their confidence in the police institution. To achieve this goal, descriptive statistics were conducted and the findings are presented in Table 1. Various conclusions were drawn from the observed patterns. First, students had low trust in members of the SAPS. It was revealed that 36% was not proud of the police while 41% perceived that the police did not always act within the law.

Table 1: Percentage distributions of students' perceptions and trust in the police (N=682)

Variables and Items	**Ratings* (%)**				
Trustworthiness	**1**	**2**	**3**	**4**	**5**
(1) The police are trustworthy	8.4	24.0	50.4	15.4	1.8
(2) I am proud of the police	12.3	23.5	43.6	16.1	4.5
(3) I have confidence in the police	14.6	23.9	44.3	17.3	2.6
(4) The police are usually honest	8.1	29.3	49.6	10.9	2.2
(5) The police always act within the law	9.7	31.4	39.7	16.6	2.6
Effectiveness	**1**	**2**	**3**	**4**	**5**
(6) The police respond promptly to calls about crimes (e.g. robbery, assault)	27.0	22.1	30.9	16.0	4.0
(7) The police are always ready to provide satisfactory assistance to victims of crime	10.9	25.2	44.0	17.7	2.2
(8) The police are doing well in controlling violent crime (e.g. armed robbery)	16.0	28.7	36.6	17.3	4.4
(9) Overall the police are doing a good job in my neighbourhood	19.2	35.0	28.0	11.1	6.6
(10) When the police stop people they usually handle the situation well	13.2	24.3	41.5	15.7	5.3
Procedural justice	**1**	**2**	**3**	**4**	**5**
(11) The police always act within the law	15.2	38.9	32.3	11.0	2.6
(12) The police treat everyone with respect and dignity	16.7	39.9	33.1	7.5	2.7
(13) The police treat everyone equally	10.9	24.8	43.4	17.7	3.2
(14) The police respect people's rights	7.3	20.5	45.7	24.6	1.8
(15) The police often take decisions that are fair to people	3.5	16.6	36.5	38.7	4.7
(16) The police take account of the needs and concerns of the people they deal with	11.0	27.3	34.6	22.9	4.3
(17) The police sincerely try to help people with their problems	9.4	34.0	36.5	15.1	5.0

*1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree.

Secondly, the students' view about the effectiveness of the police was moderately low but slightly lower than their perception of police trustworthiness. More specifically, 49% of the students indicated that the police did not respond promptly to calls about crimes (e.g., robbery and assault). In terms of performance, 54% was of the view that the police were not doing a good job in their neighbourhoods.

Thirdly, the students' perception of the procedural fairness of the police was moderately low, and also lower than their views about police trustworthiness and effectiveness. It was revealed that 54% viewed the police as not procedurally fair in their dealings with people and they held the view that the police did not treat everyone with respect and dignity. Moreover, 57% of the respondents held the view that the police did not always act according to the law.

4.2. Determinants of university students' confidence in the police

To determine the predictors of university students' perception of the police, a lead square regression analysis was conducted and three models were generated. The first model was targeted at determining which of the independent variables exerted a significant effect on the students' level of trust in the police. The model revealed that, apart from the demographic variables (age, sex and race), fear of crime and vicarious knowledge of police corruption were predictors of declining trust in the police. Parallel to most findings in the literature where citizens' fear of crime and limited trust in police trustworthiness were inversely skewed, this study showed similar skewedness. A unit increase in students' fear of crime in their

neighbourhood resulted in a .65 decrease in their trust in the police. In the same vein, a unit increase in the students' vicarious knowledge of corruption resulted in a .64 decrease in their trust in the police. In addition, female students' experiences

of the police exerted significant effect on their trust in the police. While a unit increase in the female students' experiences resulted in a .72 decrease in their trust in the police, there was a .52 decrease in African (Black) students' trust in the police. The explanatory power of the independent variables in the trust in the police model was R^2 of .19.

The procedural justice model showed that demographic variables, vicarious knowledge and fear of crime exerted significant effects on the students' negative assessment of the procedural fairness of the police. For instance, a unit increase in African (Black) students' experiences of the police resulted in a .74 decrease in their assessment of the procedural fairness of the police. The students' vicarious knowledge was also inversely skewed. A unit increase in the students' vicarious

knowledge of corruption resulted in a .68 decrease in their assessment of the procedural fairness of the police. Conversely, fear of crime was positively skewed. Unlike most findings on public perception of the police where there is often an inverse skewedness between fear of crime and confidence in the procedural fairness of the police, these findings indicated positive skewedness. A unit increase in the students' experiences of fear of crime resulted in a .53 increase in perceptions of the procedural fairness of the police. The explanatory power of the independent variables in the procedural justice model is indicated by R^2 of .21.

The third model pertaining to students' personal experiences of police corruption showed significant effect on the effectiveness of the police. This finding is parallel to most findings in criminological literature on public perceptions of the police. However, vicarious experience/knowledge did not exert any significant effect.

Demographic variables (age and sex) also had a negative impact on the perceptions of the effectiveness of the police. Conversely, fear of crime exerted a positive result on the students' assessment of police effectiveness. A unit increase in students' experiences of fear of crime resulted in a .61 increase in their confidence in police effectiveness. All the variables in this model explained 41% of the variations in police effectiveness.

Table 2: Regression analysis of factors influencing students' confidence in the police

	Trust in the police		Procedural fairness		Effectiveness	
	S.E.	β	S.E.	β	S.E.	β
Age	0.50	0.67	0.69	-0.64	0.46	-1.02
Sex (Female)	0.15	-0.72	0.36	-1.41	0.24	-0.69
Race (African)	0.18	-0.52	0.26	-0.74**	0.17	-0.77**
Personal experience	0.14	0.02	0.16	-0.01	0.21	-0.70**
Vicarious experience	0.17	-0.64**	0.25	-0.68**	0.04	0.09
Fear of crime	0.21	-0.65**	0.05	0.53	0.03	0.61**
F		27.06		29.41	77.54	
R^2		0.19		0.21	0.41	

Note: Entries are standardised coefficients (β) and standard errors (S.E.).

* P <0.05, ** P <0.01, *** P <0.001

5. DISCUSSION

The purpose of this study was to explore to what extent university students' perceptions of the police shaped their confidence in the police institution. More specifically, the study considered the correlate of trustworthiness, effectiveness and procedural justice (as proxy measures of public confidence in the police). The data were delimited to students at three campuses of the University of KwaZulu-Natal. Based on the findings, it is argued that the study validates and also extends earlier findings on the factors that influence university students' perceptions of the police. In summary, university students do have an unfavourable disposition towards the police, and this ultimately shapes their negative perceptions of the SAPS.

Fundamentally, the students' personal and vicarious experiences of corruption had significant impacts on their perception of the police. There are plausible explanations for this. In addition to media reports and research in the field of policing in South Africa that have persistently exposed the issue of police corruption, corruption itself has become institutionalised in South Africa (Olutola, 2012). In fact, students themselves could have tried to bribe the police to defeat the ends of justice. This finding is thus consistent with previous studies on public perception of the police that argue that public attitudes towards the police are significantly shaped negatively by the perception of police corruption (Akinlabi, 2017; Boateng, 2016; Tankebe, 2010).

Furthermore, fear of crime in their neighbourhoods exerted significant impact on the students' assessment of the police. Their negative perception could have accrued from the general high crime status of South Africa. Crime rates in South Africa are a reflection of the level of insecurity in the country (Burger, 2011), while the police are expected to be effective in combating and preventing crime. Unfortunately, overreliance on the SAPS to achieve the unrealistic goal of a crime-free South Africa could be a result of what Olutola describes as a *hopeless hope* (Olutola, 2014:1; Faull, 2007). However, crime in general is a symptom of the broader socio-economic challenges that bedevil the country, such as poverty, unemployment and poor living conditions. Although measures are put in place by the government to address these challenges, crime rates in South Africa are still escalating. It is therefore not surprising that students have an unfavourable disposition towards the police.

Another plausible reason for the low confidence in the police among university students is the friction that characterised student-police relations during the 'fees must fall' protest actions. Other demonstrations by students also pitted them

against the police in recent times. In the process of dispersing student-protesters, the police sometimes fired rubber bullets and teargas at students, even when the protests were apparently peaceful (Lange, 2017). Such unprofessional conduct often aggravated the situation and resulted in situations where ordinary students' demonstrations turned into a fiasco.

6. CONCLUSIONS AND RECOMMENDATIONS

The study set out to determine the extent to which university students' perception of the police shaped their confidence in the police institution. The assessment was based on the normative proposition that positive encounters with the police will engender confidence, but that negative experiences will reduce confidence in the police. While the findings of this study are imperative and have implications for policing in South Africa, the study was not immune to limitations. First, it was difficult to make causal conclusions as the study utilised a cross-sectional survey in the collection of data. It is acknowledged that a longitudinal survey using the same variables will possibly provide a more effective foundation for drawing such (causal) conclusions.

Another limitation was the limited sample size as the data were not fully representative of the student population of universities in the nine provinces of South Africa. Therefore, future studies should conduct similar large-scale representative surveys. Moreover, research is required in areas not covered by the study, particularly to determine creative strategies that can pilot effective police performance in the country.

The current research findings lend credence to related studies' hypothesised argument that the effects of police corruption, brutality and other ancillary acts and misconduct perpetrated by the police impact students' confidence in them negatively. If the police act in alignment with the ethos of their profession and conduct their statutory responsibilities in a manner that promotes healthy police-public relationships, university students will undoubtedly have restored confidence in them.

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INFLUENCE OF MATERIALISM AND STATUS CONSUMPTION ON SOUTH AFRICAN GENERATION Y STUDENTS' ATTITUDE TOWARDS MONEY AND CREDIT, AND CREDIT INTENTIONS

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─Abstract ─

As part of Generation Y, university students are often of particular interest to marketers targeting the Youth in that a tertiary qualification is generally synonymous with a high future earning potential. This student segment is also highly coveted by credit providers and, in South Africa, there are indications that they are increasingly being targeted with credit products. Unfortunately, research indicates that up to 50 percent of credit-active 18 to 26 year-old consumers are battling to pay their debts. This makes it important to understand how students' attitudes and values influence their current and future credit use. As such, this study aimed to determine the influence of materialism and status consumption on South African Generation Y students' attitude towards money and credit, and credit intentions. Data were collected using a self-reporting questionnaire from a convenience sample of 630 Generation Y students registered at four higher education campuses. Data analysis comprised exploratory and confirmatory factor analysis, reliability and construct validity analysis, and path analysis. Confirmatory factor analysis affirmed a five-factor model, which exhibited internal-consistency and composite reliability, construct validity and acceptable model fit. The results of the subsequent path analysis infer that Generation Y

students' materialism and status consumption tendencies are significant predictors of their attitude towards money, which, in turn, is a significant predictor of their attitude towards credit and future credit intentions. The findings suggest that materialistic and status consumption tendencies, together with a love for money contribute to Generation Y students' positive attitude towards credit and fosters their future credit usage intentions. Whilst this is no doubt good news for credit providers, it is incumbent upon Government, higher education institutions and, indeed, credit providers to educate the Youth concerning the responsible use of credit.

Key Words: Credit attitudes, credit intentions, Generation Y, money attitudes, materialism, status consumption

JEL Classification: M31**.**

1. INTRODUCTION

As part of Generation Y, university students are often of particular interest to marketers targeting the Youth in that a tertiary qualification is generally synonymous with a high future earning potential (Bevan-Dye & Surujlal, 2011). This student segment is also highly coveted by credit providers and, in South Africa, there are indications that they are increasingly being targeted with credit products (Enca, 2013). Unfortunately, research indicates that up to 50 percent of credit-active 18 to 26 year-old consumers are battling to pay their debts (Student Village, 2017). Over-indebtedness leads to personal financial problems and even bankruptcy, which have negative economic consequences to society at large (Baum, 2017). This makes it important to understand how students' attitudes and values influence their current and future credit use. As such, the purpose of this study was to twofold. First, the study sought to ascertain whether South African Generation Y students' credit usage intentions is a five-factor model comprising materialism and status consumption tendencies, attitude towards money, attitude towards credit and credit intentions. Secondly, the study sought to determine the influence of materialism and status consumption tendencies on South African Generation Y university students' attitude towards money and credit, and consequent credit intentions. The study focused specifically on university students as the target population because as the intellectual elite of their generation they typically lead social movements

(Gerasimova & Mokichev, 2015) and play an important role as trendsetters amongst the wider Generation Y (Bevan-Dye & Akpojivi, 2016), thereby influencing their consumption trends, including their credit consumption trends.

2. LITERATURE REVIEW

The increased availability of credit in South Africa fuelled the extraordinary rise of the middle class and thereby drove economic growth, which peaked around 2008 (Nzukuma, 2017). Thereafter, credit growth did not stop when the economy experienced a downturn with unsecured lending growing by 5 percent year on year by the end of April 2018, while real gross domestic product (GDP) growth was closer to 1 percent (Absa, 2018; Lamprecht, 2018).

South Africans are renowned as big spenders, living on credit and not saving enough for the future (Thomas, 2015). Almost 25 million South Africans, eight million more than the total number of employed people in South Africa, are credit-active and seven out of ten middle-class consumers claimed that they are financially distressed with household debt close to R1.7 trillion (Ferreira, 2017; Enca, 2017).

In consumer behaviour literature, well-established models, including the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975), the theory of planned behaviour (TPB) (Ajzen, 1991) indicate that the most proximal cause of behaviour is behavioural intention. Behaviour intentions towards credit usage relates to the intention to incur debt, whether it be applying for a loan, a credit card, vehicle financing, a retail store card or a mortgage (Chan, Chau & Chan, 2012). Both the TRA and TPB propose that individuals' attitude towards a given behaviour represents a salient predictor of their behavioural intentions (Ajzen, 1991; Fishbein & Ajzen, 1975). Where credit was once frowned upon, by the 1980s, children were growing up in an environment where 'charge it' was the consumer motto. This helped foster a 'charge now, pay later' attitude amongst Generation Y (Braunsberger, Lucas & Roach, 2005). Attitude towards credit has been empirically proven to be a more important predictor of debt than socio-demographic factors or disposable income (Livingstone & Lunt, 1992). Interestingly, Davies and Lea (1995) argue that whilst a tolerant attitude towards debt may cause people to incur debt, it is

equally possible that having to incur debt out of necessity may lead to individuals developing a more tolerant attitude towards debt.

The literature highlights that there are several factors that are associated with having a positive attitude towards credit use, including materialism (Yeniaras, 2016; Khare, 2014), status consumption (Yeniaras, 2016; Pettit & Sivanathan, 2011) and attitude towards money (Harnish, Bridges, Nataraajan, Gump & Carson, 2018; Robb & Sharpe, 2009; Phau & Woo, 2008)

Materialism generally refers to "the importance a consumer attaches to worldly possessions" (Richins & Dawson, 1990). South Africa is a very materialistic society and recent studies found that not only are the South African youth more materialistic than older generations (Duh, 2014) but also more materialistic than young adults from a selected European sample (Duh, Benmoyal-Bouzaglo, Moschis, & Smaoui, 2014). This may be explained in part since people with lower socioeconomic status or who grow up feeling disadvantaged, escape feelings of inadequacy by embracing materialistic values and goals (Kim, Callan, Gheorghiu & Matthews, 2017; Watson, 2015). Khare (2014) linked overspending and people borrowing money to acquire material possessions to an increase in materialism. Closely associated with materialism, Eastman, Goldsmith and Flynn (1999) define status consumption as "the motivational process by which individuals strive to improve their social standing through the conspicuous consumption of consumer products that confer and symbolise status both for the individual and surrounding significant others". Status consumption tendencies are positively linked to a tolerant attitude towards debt (Yeniaras, 2016; Pettit & Sivanathan, 2011) and consumers often incur debt to finance these displays of status (Chipp, Kleyn & Manzi, 2011). Similarly, research has found that people who have a more positive attitude towards money and credit are more inclined to buy on credit and incur debt (Pereira & Coelho, 2019; Harnish *et al*., 2018; Norvilitis & Mao, 2013; Robb & Sharpe, 2009; Phau & Woo, 2008). This love of money reflects a person's attitude towards money in terms of its representation of success and achievement and as a motivator (Tang & Chiu, 2003).

3. METHODOLOGY

The research design that guided the study was that of the descriptive research design, where the single cross-sectional sampling approach was used.

3.1. Sampling method and data collection

For the study, the target population was specified as Generation Y university students between the ages of 18 and 26 years, registered at four public South African higher education institution (HEIs) campuses. These campuses included two from a traditional university, one from a university of technology and one from a comprehensive university. Using the mall-intercept survey approach, fieldworkers distributed 700 questionnaires across these four campuses to a convenience sample of students who, upon approach, volunteered to participate in the study.

3.2. Research instrument

A self-reporting questionnaire, which include a section requesting demographic data and a section containing scales from published studies, was used to gather the required data. Materialistic tendencies were measured using the six-item version of the materialism scale developed by Richins and Dawson (1992). Status consumption tendencies were measured using four items from the scale developed by Eastman, Goldsmith and Flynn (1999) and attitude towards money was measured using four items harvested from the scale developed by Tang and Chiu (2003). Attitude towards credit was measured using items harvested from the attitude towards debt scale developed by Davies and Lea (1995). The items used to measure credit usage intentions were derived from the scale published by Chan *et al.*, (2012). A six-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (6) was used to record responses to these 25 scaled items.

3.3. Ethical considerations

Before finalising the questionnaire for data collection, it was submitted to the Ethics Committee of the Faculty of Economic Sciences and Information Technology, North-West University (Vaal Triangle Campus). Ethical clearance was subsequently granted with

the ethics clearance number - ECONIT-2016-113. In addition, all responses are reported in aggregate and participation in the study was strictly voluntary.

3.4. Data analysis

The data were analysed using the IBM Statistical Package for Social Sciences (SPSS) and Analysis of Moment Structures (AMOS), Versions 25 for Windows. Data analysis procedures included exploratory factor analysis (EFA), collinearity diagnostics, confirmatory factor analysis, internal-consistency and composite reliability, and construct validity analysis, and path analysis. Exploratory principle axis factor analysis using promax rotation was conducted to identify and eliminate any items that cross-loaded or had communality values lower than 0.3 from the confirmatory measurement model analysis (Pallant, 2010). Collinearity diagnostics were run to check for any multi-collinearity issues, where tolerance values less than 0.10 and an average variance inflation factor (VIF) greater than 10 suggest problems (Field, 2009). Reliability was assessed by computing the Cronbach alpha (*a*) and composite reliability (CR) values, both of which need to be above 0.70 (Malhotra, 2010). A matrix of Pearson's Product-Moment correlation coefficients was constructed to test the nomological validity of the latent factors planned for inclusion in the measurement model. Concluding nomological validity requires that the relationship between the pairs of factors be statistically significant and in the theorised direction (Hair, Black, Babin & Anderson, 2010). Convergent validity requires for standardised factor loading estimates in the confirmatory measurement model and for the average variance extracted (AVE) values of the latent factors to equal or exceed 0.50, while discriminant validity necessitates that the square root of those AVE values exceed their respective correlation coefficients in the measurement model (Hair *et al.*, 2010; Malhotra, 2010). Confirmatory and path analysis were run using the maximum likelihood method, where the level of statistical significance was set at $p \leq 0.01$. For the confirmatory factor and path analysis, the model fit indices computed included the goodness-of-fit index (GFI), the incremental-fit index (IFI), the Tucker-Lewis index (TLI), the standardised root mean square residual (SRMR) and the root mean square error of approximation (RMSEA), where GFI, IFI and TLI values above 0.90,

together with SRMR and RMSEA values below 0.08 are indicative of acceptable model fit (Van de Schoot, Lugtig & Hox, 2012).

4. RESULTS

Following the fieldwork, 630 completed questionnaires were returned; that is, fieldwork yielded a 90 percent response rate. A description of the sample is outlined in Table 1.

Table 1: Sample description

Age	Percent (%)	Gender	Percent (%)	Institution	Percent (%)	Province of origin	Percent (%)
18	4.6	Male	43.0	Traditional A	16.2	Gauteng	41.0
19	11.8	Female	57.0	Traditional B	26.4	Limpopo	10.5
20	21.6			Comprehensive	36.6	North West	30.0
21	24.1			UoT	19.8	Free State	4.9
22	18.1					Easter Cape	3.7
23	10.2					Mpumalanga	5.1
24	5.0					Kwazulu-Natal	3.2
25	2.7					Northern Cape	1.4
26	1.9					Western Cape	0.2

Concerning the age categories outlined in Table 1, while each of the ten age categories specified in the target population was represented, the majority of the participants (63.8%) were 20, 21 and 22 year olds. Similarly, whilst the sample included participants originating from each of South Africa's nine provinces, the sample was more heavily represented by individuals from Gauteng (41%) and North West (30%). In terms of gender, the sample included more female (57%) than male participants (43%). Concerning the type of HEI that participants indicated being registered at, 42.6 percent were registered at the traditional university (Traditional A & B), 36.6 percent at the comprehensive university (Comprehensive) and 19.8 percent at the university of technology (UoT).

As a point of departure, an EFA was conducted, which resulted in five factors being extracted that explained 49.1 percent of the total variance. However, the results of this first EFA indicated that two items from the materialism scale ("I admire people who own expensive homes, cars and clothes" and "The things I own say a lot about how well I'm doing in life") and one item from the attitude towards money scale ("I am motivated to work hard for money") had communalities below 0.30 and, as such, were candidates for deletion. After deleting these three items, EFA was re-run and returned a Kaiser-Meyer-Olkin (KMO) value of 0.866 and a significant Bartlett's test of sphericity (chi square = 5929.865, 231 dfs, $p \leq 0.01$), thereby indicating the sampling adequacy and factorability of the data (Field, 2009). Table 2 reports on the pattern matrix loadings, communalities, eigenvalues and percentage variance extracted.

Table 2: Exploratory factor analysis

Items	Factors					Communalities
	1	2	3	4	5	
3					.419	.321
4					.451	.310
5					.747	.529
6					.733	.482
7		.813				.643
8		.835				.721
9		.855				.687
10		.760				.596
11				.727		.562
12				.922		.807
13				.577		.382
15			.664			.495
16			.710			.478
17			.720			.552
18			.697			.490
19	.634					.521
20	.694					.530
21	.564					.439
22	.593					.335
23	.812					.614
24	.796					.539
25	.766					.590
Eigenvalues	6.186	3.053	1.763	1.543	1.324	
Percentage variance	26.046	11.915	6.130	4.827	3.913	

As indicated in Table 2, in the second EFA, five factors were again extracted, this time explaining 52.83 percent of the variance. As the sample size exceeded 600, the factor loadings, which all exceeded

0.40, were also statistically significant at $p \leq 0.01$ (Stevens, 2002). Each of the communalities exceeded 0.30, thereby indicating that each item fits well with its respective factor (Pallant, 2010).

Before testing a confirmatory measurement model of these extracted factors, collinearity diagnostics and an assessment of the nomological validity of the proposed model was undertaken. Table 3 reports on the computed Pearson's product-moment correlation coefficients between the pairs of latent factors and the results of the collinearity diagnostics.

Table 3: Correlation matrix and collinearity diagnostics

					Tolerance values	VIF values
	1	2	3	4		
Materialism					.762	1.312
Status consumption	.384*				.776	1.289
Attitude towards money	.384*	.368*			.783	1.277
Attitude towards credit	.233*	.194*	.223*		.757	1.322
Credit intentions	.251*	.254*	.187*	.467*	.745	1.342

*$p \leq 0.01$

The results reported in Table 3 indicate that there is a statistically significant ($p \leq 0.01$) positive relationship between each of the pairs of latent factors proposed for inclusion in the measurement model, thereby inferring the nomological validity of the model. With tolerance values ranging from 0.745 to 0.783 and an average VIF of 1.308, there are no serious multi-collinearity issues.

Following this, the confirmatory measurement model was run. For model identification purposes, the first loading on each of the five latent factors was fixed at 1.0 (Byrne, 2010). This resulted in 253 distinct sample moments and 54 distinct parameters to be estimated, which resulted in 199 degrees of freedom (df) based on an over-identified model and a chi-square value of 639.717, with a probability level equal to 0.000. Table 4 reports on the estimates for the measurement model, the *a*, CR, AVE and √AVE values.

Table 4: Estimates for measurement model

Latent factors	Standardised loading	Error variance	*a*	CR	AVE	√AVE
Materialism (F1)	607	369	723	713	50	71
	583	340				
	665	443				
	.621	.386				
Status consumption (F2)	.801	.641	.886	.887	.50	.71
	.851	.724				
	.823	.678				
	776	601				
Attitude towards money (F3)	.767	.588	.790	.801	.50	.71
	.867	.752				
	.625	.390				
Attitude towards credit (F4)	712	506	797	798	50	71
	675	456				
	747	558				
	.685	.470				
Credit intensions (F5)	712	527	871	854	50	71
	726	430				
	656	317				
	563	594				
	770	522				
	723	585				
Correlations	F1↔F2: 472	F2↔F3: 420	F3↔F4: 290			
	F1↔F3: .483	F2↔F4: .239	F3↔F5: .215			
	F1↔F4: 315	F2↔F5: 288	F4↔F5: 561			
	F1↔F5: 314					

According to the results in Table 4, internal-consistency and composite reliability are evident with the CR and *a* values for each of the latent factors exceeding 0.70. There is also evidence of convergent validity, with the CR values above 0.70 and AVE values equal to 0.50, as well as discriminant validity in that the squared root values of the AVE values exceed their relevant correlation coefficients. The model fit indices computed indicate acceptable model fit, with a GFI of 0.913, an IFI of 0.924, a TLI of 0.911, a SRMR of 0.047 and a RMSEA of 0.059. T

Based on this measurement model, a structural model was specified that theorised that materialism and status consumption tendencies have a direct positive influence on attitude towards money, which, in turn, has a positive influence on attitude towards credit and credit usage intentions. The un-standardised and standardised regression coefficients, standard error estimates and *p*-values estimated by AMOS for the structural model are presented in Table 5.

Table 5: Structural model estimates

Paths	**Un-standardised β**	**β**	**SE**	***p***
Materialism → Attitude towards money	.53	.38	.086	0.00
Status consumption → Attitude towards money	.26	.25	.054	0.00
Attitude towards money → Attitude towards credit	.28	.32	.043	0.00
Attitude towards credit → Credit intensions	.64	.57	.060	0.00

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

The structural model estimates outlined in Table 5 show that all regression paths tested were positive and statistically significant ($p \leq 0.01$). Materialism ($\beta = 0.38$, $p < 0.01$) and status consumption ($\beta = 0.25$, $p < 0.01$) tendencies are significant positive predictors of Generation Y students' attitude towards money. Generation Y students' attitude towards money is a significant positive predictor of the attitude towards credit ($\beta = 0.32$, $p < 0.01$), which, in turn, is a significant positive predictor of their credit usage intentions ($\beta = 0.57$, $p < 0.01$). The findings support those of previous studies. For example, Khare (2014) indicate materialism being associated with overspending and the incurring of debt, while Chipp *et al.*, (2011) indicate that consumers often use credit to finance their displays of status. Likewise, several studies have noted a link between a love for money and a positive attitude towards credit, and credit usage intentions (Pereira & Coelho, 2019; Harnish *et al*., 2018; Norvilitis & Mao, 2013). According to the computed squared multiple correlation coefficient (SMC), in combination materialism tendencies, status

consumption tendencies, attitude towards money and attitude towards credit explain 32 percent of the variance in Generation Y students' credit usage intentions.

5. CONCLUSION

The aim of this study was to confirm South African Generation Y students' credit usage intentions as a five-factor model and to ascertain the influence of materialism and status consumption tendencies on their attitude towards money and credit, and consequent credit intentions. The findings confirm a five-factor model that exhibits good model fit, composite and internal-consistency reliability, as well as nomological, convergent and discriminant validity. Furthermore, the findings of this study suggest that Generation Y students' materialism and status consumption tendencies are significant predictors of their attitude towards money, which, in turn, is a significant predictor of their attitude towards credit and future credit intentions. The findings suggest that materialistic and status consumption tendencies, together with a love for money contribute to Generation Y students' positive attitude towards credit and fosters their future credit usage intentions. After the Great Recession economies recovered and a worldwide debt boom followed due in part to low-interest rates. Despite warnings from governments and economists, this growth continues unabated. This may in part be because modern consumers are much more positively disposed towards credit than in the past and children have also grown up seeing their parents using credit. This, in turn, has normalised credit use among many of the youth. This has led to many students accruing debt and becoming overindebted before completing their studies and finding employment. Whilst this is no doubt good news for credit providers, it is incumbent upon Government, higher education institutions and, indeed, credit providers to educate the Youth concerning the responsible use of credit and prepare them to make better financial decisions. Furthermore, Generation Y attitudes towards posessions, money and debt will have to be changed to foster an environment in which prudent financial decisions are valued above displayes of material wealth.

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TRENDS AND REALITIES: PROVISION OF LOW-COST HOUSING AT KING CETSHWAYO DISTRICT MUNICIPALITY, KWAZULU-NATAL PROVINCE, SOUTH AFRICA

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–Abstract–

Housing is one of the basic human needs, however, a shortage of adequate shelter continues to be a global problem. Provision of housing through state assisted programmes is often criticised for being number-centred ignoring livelihood aspects such as unemployment, affordability and inequality. This paper aims to review trends and realities of low-cost housing provision. It examines provisions in terms of who benefits and what constitutes access to quality and adequacy of human settlements. A sample of 169 households was drawn using both systematic sampling and purposive sampling methods. Documentary evidence was used and empirical field-based research was conducted using in-depth interviews and a structured observation checklist. The content analysis method and SPSS was used to analyse the data. Trends in housing provision are determined by state provision with partial benefits accorded certain sectors of the population. Inequality in provision with discrepancies in access to housing was found to be gender-biased. Higher rates of unemployment and the absence of income have negative implications on affordability and the development of sustainable human settlements. Factors cited as contributing to housing problems include gender inequality, unemployment, allocation procedures and communication gaps as well as corruption and fraud practices. Perpetual gender inequality regarding access to housing was observed and this calls for the adoption of a gender-based lenses where housing provision is concerned. The reality remains that, provision of housing is not the only remedy to challenges faced by intended beneficiaries' adequacy, affordability, sustainability, and livelihood generation have to be considered in low-cost housing development processes, policy formulation and implementation.

Key Words: low-cost housing, livelihoods, sustainable human settlements, trends, reality

JEL Classification: R21, R31, I38, H41, H42

1. INTRODUCTION

Housing is one of the basic human needs and ranked second after food. Owning a shelter is described as a life goal, the biggest investment and a measure of personal success and a commodity guaranteeing the future of a family (Osman et al., 2018; Mohd-Rahim et al., 2019). Housing is also viewed as the prominent requirement which ensures fulfilment of aspirations, preferences and the need for shelter. However, the shortage of adequate shelter continues to be a global problem, which relegates the poor to slums, shantytowns and informal settlements, and this is particularly bad in developing countries. The main focus of most governments is on providing low-cost housing in an effort to fight poverty and improve the quality of life. The battle for access to adequate, habitable and sustainable housing for the poor is far from over. The problems experienced in terms of low income households and access to housing are directly related to other daily deprivations which include unemployment, inadequate income, inadequate access to services and unavailability of economic opportunities.

There have been limited studies on the trends and realities with regards to low cost housing provision including an understanding on who actually occupies or gains from the state provided structures and how the beneficiaries receive the efforts aimed at improving their living standard. Franklin (2011) as well as Manomano and Tanga (2018) argued that a billion new houses will have to be constructed by the year 2025 to accommodate the rapidly increasing global population and that the increase puts pressure on delivery of adequate shelter and basic utilities. Croese and Pitcher (2019) also raised concerns about the high demand for housing across all socio-economic classes in the developing countries. In support, Taiwo et.al. (2018) assert that access to housing is one of the growing problems in Africa, and this is attributed to affordability, housing choice and preferences, high construction cost and low income and/or unemployment.

Sexwale (2010), the former South African Minister of Human Settlements reflected on the rapid growth of slums and informal settlements in the country (which included a number of ‘Whites only’ informal settlements) that have ballooned to more than 2 700 slums. This demonstrates an ever increasing need for adequate shelter and that poverty and housing problems cut across the colour line. Studies have shown that the housing problems basically relate to

quantitative and qualitative insufficiencies (Seemann et al., 2008 & Makinde, 2014). The authors maintain that the approach adopted by most state assisted housing programmes tend to focus on numbers without any adequate output to achieve sustainable settlements or to look into how local livelihoods could be enhanced. Seemann et al. (2008) further cautioned that delivery is accounting or number-based. They pointed out that the crash at the end of a project cycle normally becomes insurmountable because the beneficiaries suddenly find themselves having a higher load of assets to manage resulting in continual selling of structures and ever increasing shacks or squatter settlements.

Using the lenses of the human rights approach, this paper critically examines current trends and realities in low cost housing provision at King Cetshwayo District Municipality as a research setting which could inform future approaches in provision processes and systems. It attempts to provide insight into the nature of provision; that is, who gains access, at what costs and related problems and challenges experienced in provision and receiving. This paper starts with an outline of trends, ideals and realities in housing provision using available international, national and local level evidence. The rights-based approach provides the basis for analysing and understanding the trends and realities in housing provision. The second part describes the methodology and sources of data presented in the study. This is followed by the empirical evidence on realities in provision looking specifically at how houses are provided, who has a better advantage of gaining access to ownership, the challenges experienced, what informs provision and the attitudes of the beneficiaries towards housing provision - including issues of affordability, sustainable provision and satisfaction. The results are presented and discussed and the last section of the paper provides the conclusion and recommendations.

2. LOW COST HOUSING PROVISION AND HUMAN RIGHTS

The human rights issue is encapsulated in a number of international and national instruments such as The Universal Declaration of Human Rights (UDHR) of 1948, the International Covenant on Civil Political Rights (ICCPR) of 1966, and the International Covenant on Economic, Social and Cultural Rights (ICESCR) of 1966. All of these prohibit discrimination in whatever form whether it is political, property, race, gender, national, religious or social in origin (Human Rights Watch, 2012). In the South African housing context, the rights of individuals are guaranteed in the Constitution of the Republic of South Africa (1996), which embodies the Universal Declaration of Human Rights. The South African state is party to all international human rights treaties. The founding values of the

Constitution of 1996 also include human dignity, equality and freedom. Chapter 2 of the Bill of Rights encapsulates socio-economic rights that relate to housing, health care, food, water and social security.

Section 26 (1) of the Constitution of 1996 stipulates that every individual has a right to have access to adequate shelter and a secure place to stay, and the state has to ensure that it takes reasonable legislative and other measures within its available resources to achieve the progressive realization of this right. The Housing Act 107 of 1997 defines housing development as the establishment and maintenance of stable and sustainable residential environments. It states that all spheres of government have to ascertain that housing development is affordable and sustainable economically and socially. The Human Rights Commission Equality Report (2017/18) argued that South Africa remains one of the most unequal countries in the world in terms of income and wealth. An extreme concentration of income and wealth seems to be in the top deciles of society. Trends in poverty, income inequality and wealth inequality indicate that poverty and inequality continue to manifest along the lines of race, gender and disability. The report also indicates that the enjoyment of social goods such as housing, education and health remain unequally distributed.

The rights-based approach adopted in this study is closely linked to the equity approach and suggests that no one should be viewed as a passive beneficiary of development. The principle of equality and non-discrimination, for a rights-based approach imply that the development effort should focus on the groups that may be excluded or discriminated against on the basis of race, socio-economic class, cultural or political factors (Ljungman, 2005). With reference to housing, a rights-based approach holds that a person whose rights remain unfulfilled lives under poverty and lacks access to basic human services and resources. A rights-based approach is based on the premise that others have obligations to facilitate and fulfil people's rights and fundamental freedom.

The approach further suggest that people are entitled to participate in and contribute to economic, social and political development or that people are to participate in development to the maximum of their potential, but the state has to provide a conducive and supportive environment (Ljungman, 2004). The integration of social and economic rights in the Constitution of 1996 has significant impact on development. Slack (2010) argues that theoretical analyses of rights discourses, legislation and jurisprudence are conducted by human rights lawyers and the practical analysis of government policy regarding the social and

economic rights is conducted by development theorists and this reflects lack of engagement between human rights and development schools.

3. PROVISION OF SUSTAINABLE AND AFFORDABLE HOUSING

The review of the period between 2002 and 2012 noted a broadened access to adequate housing but also indicated challenges hampering implementation of progressive policy shifts such as capacity and ineptitude, poor planning and monitoring (Selebalo & Webster, 2017). It is further noted that the proportion of households currently living in formal dwellings has increased by 5.6% and 2016, almost 8 in every 10 South African households were in a formal dwelling (Selebalo & Webster, 2017). However, an increase in households living in informal settlements has also increased. In 2016, 1 in 7 households is living in informal housing and the figures are prone to under-estimation or under-capturing informal dwellings (Selebalo & Webster, 2017). The calculations may leave out households in backyards or in dwellings adjoined to other formal structures. The authors also raise concerns about trends in housing provision which show a persistent decline in delivery and a decline in budget allocation for housing between 2014/2015 and 2016/2017; yet, the demand continues to increase.

Housing inadequacy for low-income groups is attributed to provider perceptions about the housing needs of the people, planning inconsistencies and ineptitude, and the centralisation of policy implementation (Croese & Pitcher, 2019). Governments have development aspirations that fail to meet the needs and practices of ordinary people (Charlton, 2018). Governments tend to use socially disruptive approaches such as forced removals and the demolition of informal houses and the resettlements of the poor. Gilbert (2007), however, claims that the term ‘housing problems’ complicates the delivery process because campaigns aimed at improving living conditions of the poor tend to create settlements that eventually become social ghettos and very few of the efforts have proved successful. The number-centred focus in provision of houses in the developing countries mostly ignores the crucial livelihood aspects such as poverty and high levels of unemployment and sustainable provision. Smet and Van Lindert (2016) argue that housing provision should look into connectivity to employment centres. The focus should also be directed to the economic and social opportunities particularly those that have potential to stimulate the development of neighbourhood economies and thus enhance livelihoods within human settlements.

In support, Seemann et al. (2008) maintain that provision of formal structures to the poor raises concerns as it suggests adjustment in livelihood strategies and

household expenditure in that people have to accommodate extra costs incurred with ownership, such as service charges, maintenance of housing units and a somewhat different style. It is therefore acknowledged that the development of new neighbourhoods has to take into account critical livelihood issues such as poverty, affordability levels, unemployment and other challenges. Housing inadequacy seems to be understood as an outcome and aspect of income poverty. A sustainable habitat approach prioritizes the basic needs of the poor, health, environment and livelihood aspects which include empowerment of the poor and provides a feeling of self-worth. Although affordability is not an inherent characteristic in housing, it determines the trends in provision and the relationship between income and access to appropriate and adequate shelter (Robinson et al., 2006). While Bolnick (2018) asserts that the needs of the poor are consistently ignored and the financial institutions regard investment in low cost housing as too risky. Measuring affordability seems to be a complex process which is influenced by factors such as income level, location, employment status and other factors. The idea of affordable housing recognizes the needs of low income households, cost of transportation and access to employment, basic services and facilities. The capital subsidy scheme makes it possible for the poor to gain access to shelter but there are a number of factors that come into play and these involve asking questions such as "Affordability to whom?"; "On what standard of affordability?"; "For how long?" (Stone, 2006).

Robinson et al. (2006) points to the 'shelter-first approach', which assumes that the first priority on the household budget is given to housing maintenance, bond repayment or rental and other costs are met with the remainder. Contrary to this assumption, Taiwo et al. (2018) claim that the main determinant of the housing demand is the household size with income, affordability, preferences and choice playing a secondary role. Charlton (2018) alludes to the mismatch between the housing programme and the intended target population relating the assumption to the South African home-ownership strategy, which suggests that households are homogenous; therefore, RDP houses suit the shelter needs of households. Charlton (2018) and Taiwo et al. (2018) argue that housing delivery approaches and strategies adopted worldwide tend to ignore existing heterogeneity and fluidity among households and that housing is heterogenous and a complex product.

On the other hand, Stone (2006) correctly claims that households may prefer to reside in unsafe, inaccessible shelter and in conditions that fail to meet physical standards of decency if the costs of obtaining or living under satisfactory conditions prove to be prohibitively expensive and unaffordable. Low-cost

housing provision in South Africa is characterized by high levels of beneficiary movement out of the newly created settlements back to the slums or squatter settlements (Gilbert, 2004). The argument is consistent with that of Cross (2006) and Mitlin (2008) that improvements might miss the target of building decent houses for human occupancy due to the diverse needs of the poor, social expectations and realities of unaffordable living costs in new settlements. Two fundamental questions are raised. First, is the capital housing subsidy a solution to the complexity of the housing needs of low income groups? Second, does the housing policy through the subsidy scheme provide adequate benefit to the intended users which takes into account access to employment opportunities?

4. METHODOLOGY

The study was conducted at King Cetshwayo District Municipality, the third largest district municipality within the province of KwaZulu-Natal and is characterized by both affluent and poor communal settings. Three local municipalities were considered for the study on the basis of having state-subsidized housing projects and for the proximity of projects to economic activities. The paper draws on documentary evidence available from reviewed articles on housing as a human need, trends in provision, the right to adequate shelter and processes and challenges in housing delivery. The empirical field-based research conducted in the selected areas provided insight into realities in provision within the district. The study comprised a sample of 169 participants as beneficiaries of state-provided housing projects. The face-to-face interviews using open-ended questions and a structured observation checklist were used to collect the required data. The paper focuses on aspects such as access to housing, livelihood issues, allocation procedures, ownership, meeting of needs and discrepancies, satisfaction, affordability and sustainable housing development. Content analysis was used to analyse the qualitative data. The Statistical Package for the Social Sciences (SPSS) was used for the quantitative data. The chi-square test was used to test statistically significant relationships between access and income, employment and income, perceptions, and the cost of living and access and income.

5. RESULTS AND DISCUSSION

The results presented in this section provide insights into realities related to access, livelihood issues and allocation, satisfaction and affordability.

5.1. Access to housing

The study areas are also characterised by a relatively youthful population (above 60%). Participants over 50 years of age accounted for just below 20% of the sample. Only 23% of the participants had acquired tertiary education with more than 60% having no education or having dropped out of school without secondary school education. The results also showed a significant number of single-parent households in the area mostly headed by women. A high household dependency ratio of 1:5 was also noted. Housing, in selected areas is mainly provided through the state capital subsidy scheme which is graded on a sliding scale on the basis of the household monthly income. Houses are supposedly provided on the basis of ownership as the main form of tenure; however, a shift away from this was noted in the results. Most participants occupied the houses on rental basis not as owners of the properties, suggesting that the majority of participants in the study were occupants and not owners of properties.

The most striking finding which has implications for access to housing was a skewed gender distribution of the sample participating in the study: women comprised 56% of the total participants whilst men made up 44%. The results provided a different position in terms of access to housing in that 75% of male participants who are permanently employed owned state subsidized housing units. Whereas only 60% of permanently employed females had access to state-provided housing ownership. Of males in occasional employment, 25% were provided with subsidized housing and very few females were allocated free housing in this employment category. The study also showed that 71% of permanently employed females gained access to credit-linked type of home ownership as compared to 50% males.

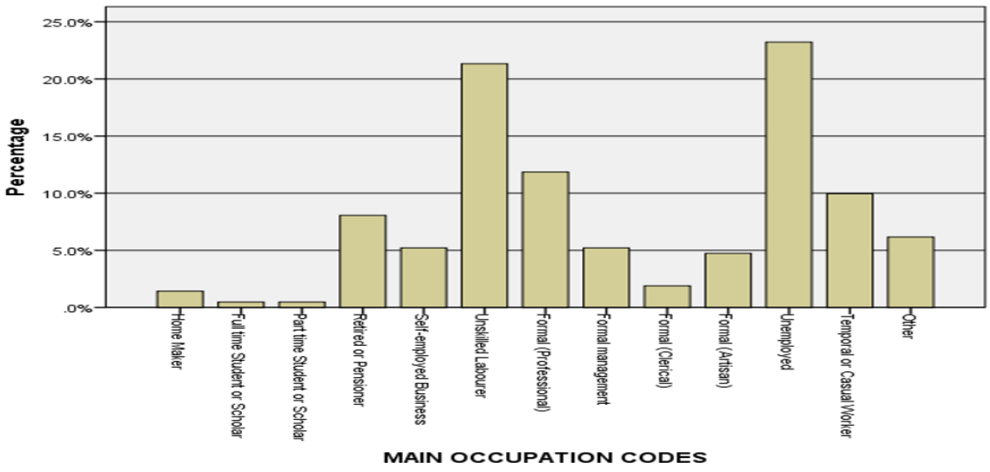
The reality displayed indicates perpetual gender inequality concerning access to assets, particularly if more females seem to experience circumstantial pressure from external forces that determine access to a decent shelter. The argument stems from the point that more males gained access to free housing as compared to the percentage for females and one is tempted to relate this to gender inequality. The results depict that gender inequality exists particularly with access to assets, and suggests a substantial percentage of female participants gaining access to housing through the use of mortgage bonds, housing loan facilities or any other form of credit facilities available. This is contrary to the Constitution of 1996 and the right to adequate shelter as proposed in The Universal Declaration of Human Rights and the International Covenant on Economics, Social and Cultural Rights, treaties that reflect global and national agreements and commitments on human rights that

people equally have a right of access to adequate shelter. Interpreting this scenario, Turok and Scheba (2017) claim that a rights-based agenda has yielded partial benefits or has selectively benefited a certain section of the population.

5.2. Livelihood issues

Trends in livelihood generation issues were explored using variables such as employment status, sources of income, affordability and location. A significant number (just below 25%) of participants were unemployed (see Figure 1), with just above 20% employed as unskilled labourers hired mostly as temporal or casual workers. It should be noted that a substantial percentage served as volunteers in community services without any specified remuneration. Less than 5% were classified as involved in education (learners). Furthermore, 39% of the respondents receive their income from other types of employment such as seasonal, part time, temporal and occasional employment. Out of 61% in fulltime employment, 44% earned below R4 800 household income per month and 24% earned between R4 801 and R9 600 per month. 19% were in various types of employment earning between R0 and R1 000 per month and 87% of this group was not employed on a fulltime basis. More than 60% of the beneficiaries earn an income that is below R4800 per month and the majority are in fulltime employment. This has implications in terms of access to housing and affordability levels and suggests a relatively high proportion of people, who though employed, are highly dependent on the state support for their livelihood.

Figure 1: Employment Status and Main Occupation Codes



Source: Author Survey Data, 2018

It is noted that the income pattern shows that fulltime employees are more or less distributed across most of the income bands, whereas non-fulltime employees are almost all clustered in the lower two income bands (R0-R1000 and R1 001 –R4 800). The results also pointed to housing development that failed to provide opportunities for employment in construction sites. The participants felt that the developers hired workers from other areas which deprived them of wage employment. This defeats the aspect of housing provision as a developmental process which looks into the needs of beneficiaries, job creation, livelihood generation and active participation of the users of space.

The question raised relates to whether housing provision alone could be regarded as sufficient to address livelihood issues. The results revealed widespread poverty, existence of various forms of gender inequality among the beneficiaries and occupants of state-provided houses, high rates of under-and unemployment with a heavy reliance on the social support provided by the state. Of the participants, 32% were dependent on various forms of social grants such as the old age pension, welfare grant for the disabled and child grants. Gilbert (2014) cautioned against provision of housing assuming that job opportunities could be created, as this does not guarantee any significant changes in the quality of life of the beneficiaries. The creation of job opportunities could ideally be envisaged but not in reality. There is a notable increase in the number of people in what is termed 'housing-cost-induced-poverty' which refers to people's experience of poverty when their affordability levels are affected by a sudden change in housing costs and related charges such as payment for service charges which normally occur when people move to improved housing units.

Gilbert (2014) maintains that provision of housing to the poor might not be a cure or remedy to problems experienced but entail additional expenses such as utility bills, maintenance costs which may prove excessive thus drive the poor back to squatter settlements. The results raise a number of questions. Does provision of free housing units to lower income groups contribute to housing poverty reduction? If it does, why do people or recipients move out of freely provided housing units? Is it due to lack of affordability, quality of the houses, or that the units do not address the housing needs of the poor? Tunstall et al. (ibid) argue that there appear to be a close relationship between people's experience of poverty, material deprivation and housing conditions and that these factors are closely intertwined. Similarly, Mitlin (2001 & 2008) sees a relationship between urban poverty and inadequate shelter and that the lowest income households dispose of their upgraded structures because of additional costs incurred by living in an improved area.

5.3. Satisfaction and cost of living

When comparing perceptions on the cost of living with the monthly household income, it was observed that all respondents with no income were dissatisfied and 54% of those earning between R1000 and R4 800 household income per month also expressed dissatisfaction with the cost of living (see Table 1). However, 43% of the respondents in the higher income category were satisfied with the cost of living. This seems to be contrary to the normal trend where higher income groups tend to be dissatisfied due to higher living standards, thus higher expenses and expectations. However, it is concluded that the higher the income, the more satisfied households are with the cost of living. Thus, an increase in level of income results in more satisfaction with living conditions.

Table 1: Monthly Income and Perceptions on the Cost of Living

		COST OF LIVING						Total
		Very Satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very Dissatisfied	Unsure/ don't know	
MONTHLY INCOME	No income	0	0	2	0	0	0	**2**
	R1 – R1000	0	11	5	17	6	0	**39**
	R1000-R4 800	0	25	9	38	5	2	**79**
	R4801-R9 600	1	14	2	2	0	0	**19**
	R9601-R19 200	0	10	10	3	0	0	**23**
	R19 201-R38 400	0	1	0	2	0	0	**3**
TOTAL		**1**	**61**	**26**	**64**	**11**	**2**	**165**

Source: Author Survey Data, 2018

Determining whether there exists statistically significant correlation between monthly income categories and satisfaction or dissatisfaction with the cost of living, it was hypothetically concluded that there is a marked difference between the monthly income categories and perception on the cost of living, with those in higher income categories feeling more satisfied than those earning less (see Table 2). Indeed, a significant difference between the groups of people with various income and their perception on the cost of living was observed in that, the chi-

square value was 52, 69; the degree of freedom was 25 and the level of significance was less than 0, 05 (See Table 2).

Table 2: Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	52.689[a]	25	.001
Likelihood Ratio	50.710	25	.002
Linear-by-Linear Association	13.544	1	.000
N of Valid Cases	165		

a. 25 cells (69.4%) have an expected count less than 5. The minimum expected count is .01.

Source: Author Survey Data, 2018

5.4. Allocation procedures and tenure options

The most common trend with regard to allocation procedures suggests state controlled allocation because similar results were obtained in the study area showing that construction and allocation has solely been under municipal control. Almost all participants indicated that they were informed of their completed units, ready for occupation and were never invited in the development process including decisions on 'who lives where'. It transpired that some of the beneficiaries unsuccessfully tried to locate their housing units, which suggested allocation only on paper. The reality is that some of the unfortunate beneficiaries still do not have access to adequate housing. These people could be disadvantaged because they would never benefit from the state if the government database have inaccurate records or suggest that they were allocated. Tissington et al. (2013) explained that the system may record these beneficiaries as having qualified or received their houses when they have not been officially and physically given possession of their housing units. Corruption, fraudulent practices and illegal occupation present allocation challenges and are to a certain extent responsible for maladministration.

The selection and allocation criteria of housing units is not a transparent process and tends to create tension because it is more top-down in approach. It is prone to corruption and appears to be done on the basis of access to resources and power and ignores individual household needs. Studies have shown that the allocation and delivery of services by professionals or government or any persons other than the beneficiaries has a tendency of breaking the fabric of society. It deprives people of practices such as reciprocation and other forms of economic and social support the poor usually engage in their attempt to generate a living. Gilbert (2007) maintains that relocation tends to be disruptive to existing networks, both

social and economic, and raises costs for the poor in terms of maintenance of structures and transport to work as it lengthens the journey to work and other services.

6. CONCLUSION AND RECOMMENDATIONS

The study concludes that the rights based agenda with reference to housing provision has yielded partial benefits that are not equally enjoyed by all deserving citizens. Women predominate but experience difficulties when it comes to access to housing. The common trend remains the state provision, which is characterized by the development aspirations that fail to complement the housing needs of the beneficiaries. Human settlement development should not be guided by the number of units constructed and should not trivialise issues of equality, sustainable provision and affordability. These should be truthfully considered and implemented.

The reality remains that continued distribution of free housing units does not translate to improved living standards. It is concluded that a correlation exists between sustainable settlement creation and livelihood generation. The policy and low-cost housing provision strategies have to be informed by the housing needs, aspirations and affordability standards of the beneficiaries. The paper recommends that:

- Post occupancy evaluation has to be conducted to inform future trends in low cost housing provision.
- Provision should be guided by targeted interventions and a housing development process that take into consideration critical issues of affordability, sustainable provision and the livelihood generation aspect.

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DECOLONISING THE SOUTH AFRICAN HIGHER EDUCATION CURRICULUM: AN INVESTIGATION INTO THE CHALLENGES

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─Abstract─

The end of apartheid in 1994 and the ongoing student protests since 2015 have caused renewed interest in the decolonisation of higher education in South Africa. Since this time, the model of academic organisation which underlies many South African universities has not considerably changed. These institutions tend to remain colonial outposts, rooted in Western disciplinary knowledge. The decolonisation of the curriculum is an important question that warrants attention, given that epistemic and hegemonic systems at most South African universities were entrenched during apartheid. This article examines a view of decolonisation that is based on transforming the South African higher education curriculum, a curriculum that is generally designated as westernised and Eurocentric. The research question is: Which challenges are faced in the attempt to decolonise the South African higher education curriculum? Because a qualitative research design accounts for experience and perception, it was deemed most suitable for the purpose of this article. A review of relevant literature provided a foundation for an interpretation of the challenges encountered. One-on-one, semi-structured interviews were conducted with academics within a higher education environment to determine whether the different challenges or themes as propounded by the literature align with those articulated by the interviewees. The researchers found

that the call for the decolonisation of institutions and curricula presents challenges to the academic project as well as to academics. There is not sufficiently-developed African content to jettison Western education without leaving a void. Yet decolonisation is feasible and does not have to be a protracted process. For this reason South African institutions of higher learning should provide research solutions for the nation by developing curricula based on the best knowledge, skills, morals, beliefs and traditions from Africa, as well as Europe. Such a curriculum will relate to the needs of students; in other words, it will be fit for purpose.

Key Words: decolonisation, curriculum, challenges, epistemic and hegemony

JEL Classification: I23

1. INTRODUCTION

In the current system of higher education (HE) discourse, decolonisation is at the forefront of a stimulating and heated debate. Colonial powers conquered the terrain of the colonised and enslaved their bodies, and also their minds. Cultivating a new cultural identity through a European lingua franca and disciplines such as education, economics, science and law, the colonists alienated the colonised from their own culture and denied them a space to speak from their own frames of reference (Chilisa 2012). Prioritising all things European resulted in "the denigration and decimation of indigenous knowledges" (Le Grange 2016:4). In South Africa, the current model of academic organisation of the university, based on Western and colonial disciplinary knowledge, was established during apartheid and has not been significantly revolutionised in post-apartheid (Le Grange, 2016). Much of what is taught today is a legacy from the colonial past. Consequently, the higher education system is still largely racial and class-based. It endorses Western knowledge and rationality, but discounts and represses the knowledges of the formerly colonised people. In 2015, students and a small number of progressive academics, who realised how foreign and alienating South African institutional structures were, began a campaign to end "the domination of Western epistemological traditions, histories and figures" (Molefe, 2016:32) by decolonising the South African higher education curriculum. Genç (2013) submits that a curriculum is more than a set of subjects, module frameworks, prescribed readings and assessments guidelines; it is everything that goes on within the institution, including extra-curricular activities and interpersonal relations. It includes the stories that students are told about their past, present and future. In effect, it is the transmission of a cultural heritage and the planning of a nation.

This article examines the process of replanning a nation based on transforming the curriculum of the South African higher education (HE) system. South Africa's westernised and Eurocentric higher education curriculum may no longer be fit (appropriate) for purpose. Fit for purpose means that something is of a decent standard for something or someone. In essence, it is good enough to do the task it was designed to do, accomplish or attain. The vehement student protests – #FeesMust Fall and #RhodesMustFall – that reverberated nationally in 2015 were instrumental in bringing the demand for an Afrocentric curriculum and education to the fore, and reveal that there are indeed concerns pertaining to the relevancy. Students articulated that the content of the curriculum was developed without considering their needs and the context in which it was going to be implemented. In other words, the subject content lacked authenticity and alienated them from their own culture. At the Higher Education Summit held in October 2015, the Minister of Higher Education and Training, Blade Nzimande, called for the Africanisation of universities, demanding that all universities are to discard the problematic elements of their colonial and apartheid past (Le Grange 2016). Yet the road to decolonisation is not an easy one. As Le Grange (2016:5-6) observes: "decolonisation is not an event but a process . . . ." There are also conflicting opinions about how to go about the process of decolonising knowledge and the curriculum. The researchers view that it should be carefully managed as various challenges will have to be overcome.

The theoretical framework underpinning the challenges of dismantling the hegemony of Western epistemologies in the higher education curriculum is, undisputedly, conflict theory. Sinn (2016) conveys that conflict theory relates to social groups who are in a constant struggle for scarce resources and power. Conflict theory elucidates how conflict shapes the social world, leads to change and empowers the marginalised. In the social sciences, conflict theory is used to examine the power dynamics among members of opposing groups. Conflict arises when groups of individuals challenge or contest laws, institutions, social policies and a status quo that promotes inequality (Forsyth & Copes, 2014). Examples of such conflict are clashes and violence, and protests and revolutions.

The purpose of this article is to investigate four challenges of decolonising the South African higher education curriculum that may potentially lead to conflict. These challenges were identified by means of a literature review and then confirmed in one-on-one interviews with individuals. The four themes or challenges that emerged are: lack of content and authorities, time, the perception that Western knowledge is superior, and resistance to change.

2. METHODOLOGY

Because a qualitative research design accounts for experience, perception and meaning, it was considered most suitable. In the first part of the paper, a literature review provided a foundation for an explanatory and descriptive interpretation of the challenges encountered when incorporating indigenous knowledge and skills in higher education. Interviews were also conducted to determine whether the different challenges or themes as outlined by the literature correspond to those articulated by respondents. The study was guided by a contextual approach to data collection and interpretation. The reasoning adopted was inductive reasoning.

The researchers identified fifteen academics within a higher education environment by means of the purposive sampling method, which, according to Creswell (2012), implies that the researchers select individuals or research site(s) as guided by the principle of fitness for the purpose. In this instance participants were selected on the basis of whether they meet the requirements of the study's objectives. Participants were informed about the research and asked if they would be willing to participate. Nine of the fifteen individuals (60%) invited to attend the interview agreed. Ethical considerations were taken into account in that the researchers explained what the research project entailed and its objectives, and assured participants that their responses would be treated as confidential and anonymous. Participants were also told that they did not have to participate in or complete the interview. The participants gave consent to be part of the research and communicated their understanding of the research project. Before the interview commenced, the interviewers asked interviewees if they had any questions.

This study was conducted in 2018 and 2019 with academics from the Vaal University of Technology, Vanderbijlpark and from the University of the Witwatersrand, Johannesburg. Participants received a questionnaire approximately one month before they were interviewed. Giving the questionnaire to respondents before the interview allowed them the opportunity to familiarise themselves with the key concepts in the questionnaire and to reflect on their teaching styles and the content of the syllabus they teach. The interviewers had a core list of questions that each participant was asked during the interview; this ensured standardisation and consistency in the types of questions posed. When the interviewers deemed it necessary, they could clarify particular questions to the interviewees. Interviewers also had the flexibility to follow up questions with additional questions in order to probe the interviewees' responses further. The interviewers guarded against leading questions to certain responses, which would

introduce bias (Laxton, 2004). The open-ended questions that were asked gave participants the opportunity to express themselves freely. The duration of the interview was on average 15 minutes. In sequencing the interview questions, Laxton's (2004) recommendation of starting with fact-based questions was followed. Only after the factual questions were asked and interviewees felt more at ease, were they required to comment on their understanding of the term decolonisation, their experience of decolonisation in the higher education environment, if they think decolonisation is feasible, and the current context and challenges of decolonising the South African higher education curriculum. Participants were asked at the end of the interview process if there was anything else they wished to add in the event of the author not thinking of or being aware of certain issues pertinent to the research. The participants' responses to interview questions were captured verbatim. Shorthand notes containing the primary data collected in the interviews were typed immediately after each interview. The typed data was then subjected to content analysis.

Anderson (1990:222) describes interviews as "a specialised form of communication between people for a specific purpose associated with some agreed subject matter". Laxton (2004) reports that a major advantage of interviews is the ability to obtain in-depth, qualitative information. As compared to other techniques of data collection, for example surveys and questionnaires, interviews enable researchers to gain research-relevant information based on (i) emotions, feelings, experiences, (ii) sensitive issues and, (iii) insider experience. This research intended to explore interviewees' emotions and experiences regarding decolonisation in the HE environment. Interviews also generated the evidence for achieving the research objectives of describing, predicting or explaining (Cohen et al., 2007). Because conducting semi-structured interviews and analysing the data provided by them are time-consuming, the number of interviewees was limited.

A substance investigation was applied to decipher the patterns or themes that emerged from the question and answer data. The researchers employed Cresswell's (2014) six steps to examine and analyse the qualitative information generated by the participant responses: 1) The data was organised and prepared for examination and analysis; 2) The researchers read the data to obtain a general sense of the information and to assess its overall meaning and importance; 3) The data was coded by organising it into categories and labelling the categories; 4) The coding process was applied to describe the categories or themes that emerged as findings; 5) The researchers described and gave details on the themes or challenges; and 6) they interpreted the findings to discover what they have learnt.

3. LITERATURE REVIEW

Ndlovu-Gatsheni's (2016) defines decolonisation as the withdrawal of direct colonialism or colonial administration from colonies. Historically and in its juridical-political sense, it means the end of colony; that is, the period after the collapse of colonial rule. Smith (1999) identifies deconstruction and reconstruction as an element of decolonisation. This and other obstacles to converting the curriculum, as identified in the literature, will be discussed subsequently.

3.1. Deconstruction and Reconstruction

Present-day educational discourse answers to an ideologically driven educational practice that expects persons to be educated for the development and maintenance of sociological and environmental functions, as well as for economic purposes (Higgs, 2002). In such a climate, education is the servant of the state, touting a political agenda. Deconstruction involves taking apart the system to expose its flawed foundations and reconstructing it on a new basis. A unique and powerful mode of mind for looking at ideas and concepts, deconstruction questions assumptions cloaked in ethical, philosophical, juridical and political concerns, not necessarily to tear them down, but to gain a new awareness. In the field of education, it signifies the disruption of the dominant ideological influences that regulate and constrain South Africa's educational system – turning it into a process of information transfer that ensures conformity to socio-economic and political designs – and contemplating what education can and should do in terms of justice and our responsibility towards others. Deconstruction, in conjunction with reconstruction, implies disposing of that which has been wrongly written, and radically "interrogating distortions of people's life experiences, negative labelling, deficit theorizing, genetically deficient or culturally deficient models that pathologized the colonised . . ." (Chilisa 2012:17). It involves asking ourselves difficult questions, such as why we are the way we are, why we do the things we do, why we live the way we live, and why the things that happened to us happened. By finding answers to these questions, and by retelling the stories of the past and re-envisioning the future, deconstruction and reconstruction can change the nature of educational discourse by allowing it to open up and think and speak for itself, instead of for the state, a dominant ideology or social practices.

Mbembe (2016) postulates that before implementing an Africanised version of the HE curriculum, educators will need to affirm education in the face of different forms of knowledge, and reject or, at least, restructure the Western model of academic organisation that turns students into customers and consumers. Whereas

deep learning entails the construction, reconstruction and deconstruction of established views, modern-day students learn for the purpose of acquiring skills that will make them work smarter and faster and help their employers gain an edge in the global economy. The outcome is a generation of students that are more interested in the use their 'educational commodities' will have on the open market – in other words, the material payoff of their studies – and less in the reconstruction of knowledge and experience that will enable them to accumulate and control further knowledge and experience and participate in an ever-changing society. Mbembe (2016) attributes this phenomenon to institutions that are operated in accordance with business principles and aim to satisfy their customers above everything else.

3.2. Scarcity of Theory

A further challenge to decolonising the curriculum is articulated by Lindauer and Pritchett. Lindauer and Pritchett (2002) believe that the scarcity of theory and evidence-based research from which to draw are a bigger problem than the lack of a dominant set of big ideas that command universal acclaim. Higher education (HE) requires an environment where academics are trained and curricula developed. Without trained academics and without localised theory in HE to develop curricula, the educational system will be an off-the-(European) shelf imported facility, with little relevance to the lived circumstances of students and society. The outcome of this is the systematic subversion of the wisdom and knowledges that reside in indigenous peoples' experiences, histories and worldviews (Le Grange 2016). To guard against this, Heleta (2016) stresses that South African institutions of higher learning must tackle and deconstruct the epistemic violence and hegemony of Eurocentrism which impede decolonisation and allow unequal power relations and minority privilege to remain prevalent. Epistemic violence or epistemicide signifies the decimation or murder of non-western ways of knowing or seeing the world, languages and culture. The eradication of the knowledges of the subordinated culture precipitates the erasure of the social groups that possess it. In South Africa, a hegemonic tradition undermines anything that is articulated, thought and envisioned from outside these frames, seeing this as regressive and valueless. Hence, the South African HE system remains a colonial outpost that reproduces hegemonic identities instead of eliminating hegemony and contributing to social transformation. This would explain why in 2015 only 60 per cent of black students completed their first year of studies, and 25 per cent of those enrolled eventually graduated (Le Grange, 2016).

3.3. Epistemological issues

The lack of theory exacerbates the corrosive culture of consultancy that turns South Africans into informants instead of knowledge producers or creators (Mamdani, 2011). Dei (2000) points out that indigenous (African) knowledge does not exist in what could be described as a pristine fashion and that hegemonic views of the west still reside within our society. Moreover, plans to Africanise the curriculum might be there, but the willingness – political and personal – to implement these plans is lacking (Department of Education, 2008). Thus, the HE system and curriculum continue to reinforce the belief that there is not much we can learn from the Africa, developing countries and the Third World and that universal knowledge derives from the Western world (Pillay, 2015).

3.4. Other Challenges

Jonathan Jansen (2016), former rector and vice-chancellor of the University of the Free State (2009-2017), argues that a major challenge to doing away with curricula that perpetuate Western bias is getting academics and students involved in critical conversations on a regular basis. Nevertheless, at certain HE institutions there has been little or no attempt to seriously engage in discussions about what it means to decolonise knowledge, thought, curricula, disciplines and the university or academy. The debate on decolonisation that characterises South Africa's changing educational landscape is regarded as noise that will, in due course, die down and therefore does not merit any particular attention (Jansen, 2018).

4. FINDINGS AND DISCUSSION

It was discovered during the interviews with the academics that most of them did share a reformist perception of decolonising the curriculum to make it more suitable for the majority of students in higher education in South Africa. While three participants (33%) wished that the noise surrounding decolonisation would die down so that universities could adhere to the existing westernised Eurocentric curriculum, the majority (67%) understood the need to introduce a considerably more progressive and relevant Afrocentric curriculum that will further social cohesion, cultural representation and meaningful access to knowledge in the South African educational context.

The discussion of the findings are structured according to four key themes or challenges which emerged from the participants' answers.

4.1. Lack of content and human resources

Three of the participants (33%) agreed with Le Grange (2016) that one of the biggest challenges of decolonising education is not only what we teach but also how we teach. The information and knowledge that Africa has produced is not sufficient to compete on a global scale or to inspire Africans. Le Grange (2016) posits that the call for the decolonisation of institutions and curricula presents challenges to academic institutions as well as to academics. If African models of academic organisation were to replace Western ones, curricula will need to be reconstructed to include knowledge systems and epistemological traditions from the global South. Intellectual authorities to spearhead the process will have to be located.

Congruent with what the literature reports, academics concur that South Africa's HE educational system, in general, still endorses Western knowledge and rationality at the expense of non-Western methods of knowing. This calls to mind the unequal relationship that existed between coloniser and colonised where the colonising culture positioned itself as superior while the colonised culture was relegated to the periphery (Ramogale, 2019). To make reparation for the injustice of the past, the Council of Higher Education in 2017 advocated the introduction of disciplines such as African Studies, or the replacement of a particular canon of works perceived to be Eurocentric in nature by locally-produced texts. The CHE's aim is to develop appropriate rigorous local content that serves the needs of students and addresses the developmental challenges of South Africa, as well as contribute to knowledge production from Africa. In *Decolonizing the Mind: The Politics of Language in African Literature*, the Kenyan author Ngungi wa Thiong'o (1986) writes that the lack of congruency between colonial education and Africa´s indigenous traditions has created a people who are distant from their reality and foreigners in their own land. The CHE's efforts to create curriculum relevancy should diminish the feeling of alienation that students experience and expressed during the 2015 protests. The shackles of colonialism can be released and structural disenfranchisement overcome if academics and students push their thinking about decolonised education into practise.

4.2. Time

In line with Lindauer and Pritchett (2002), three participants (44%) identified time as a reason to delay the implementation of a new curriculum. These academics expressed concern about how long it would take to replace a Eurocentric educational system with a system that draws on both home-grown and international theories and science. As the academics put it: "Colonisation did not

happen overnight and neither will it be undone in a flash. In the opinion of this academic, "changing the system at tertiary level would be next to impossible." However, the demand of the majority to be emancipated from the domination of Western epistemologies is not new. Mbembe (2016) recollects that the calls for decolonisation and Africanisation, particularly in higher education institutions, have been challenged and stifled whenever they arose in the past.

In response to these participants' concerns, the researchers contend that if an institution is resistant to change, it will find an excuse, but if it is committed to authentic transformation, it will find a way to implement it. Decolonisation is possible and does not have to be a protracted process. South African universities are not ivory towers (domains of intellectual pursuit at the exclusion of everything else), and can act as "hotbeds of research solutions for the nation" (Wingfield (2017:1). The deputy vice-chancellor for teaching and learning at the Mangosuthu University of Technology, Professor Marcus Ramogale (2019) avows that universities can become hubs for social inclusion and centres that advance the intellectualisation of African indigenous knowledges. Some universities have indeed heeded students' call for free quality, decolonised education and taken the initiative to implement strategies for academic transformation. For example, at the University of Cape Town (UCT), a central curriculum committee was appointed, tasked with incorporating knowledge systems based on indigenous cultures, histories and traditions into the curriculum. Stellenbosch University (Maties) has adopted a curriculum renewal project that purposes to dismantle Cartesian dualism and will result in the decolonisation of at least ten academic programmes, such as medicine and law. It is estimated that it will take two years for the ten programmes to be extensively renewed. Some new modules have already been introduced at this institution in 2019. At the University of Johannesburg (UJ), all first-year undergraduate students have to take an online module, African Insights, to familiarise themselves with the philosophies and writings of African leaders. The University of South Africa (UNISA) amended its language policy in 2016 to give effect to the transformation agenda of the country's educational landscape. This open-distance university committed itself to functional multilingualism by beginning to produce multilingual glossaries as tools for teaching and learning. These glossaries will build capacity in all official South African languages so that these languages can eventually be used as a medium for instruction in higher education.

4.3. The perception that Western (white) knowledge is superior

As Dei (2000) holds forth, the challenge of the perceived superiority of Western (white) knowledge is another obstacle to changing the curriculum. One participant emphasised that the perception of stakeholders, such as the parents of students, is that a Eurocentric qualification at a westernised institution is desirable because it will improve their children's chances to enter the global arena. This participant declared that many believe that "white is right". She recalled a ditty from the apartheid era ("Black, Brown and White") that reinforced her perceptions of the superiority of being white: "If you was white, should be all right / If you was brown, stick around / But as you's black, mmm brother, git back git back git back." Another academic mentioned that to decolonise higher education will make students' world smaller, not bigger: "It will confine them to the proverbial box that we have been trying our whole careers to make them think out of." According to these two participants, decolonising the curriculum could dilute the content and the meaning attached to it since an unadulterated Afrocentric curriculum and scholarly knowledge are, if not inferior, then at any rate thought of as inferior. It will not be possible to remain intellectually superior if we stay only with what is familiar – if Africa is the beginning and end of our knowledge. One interviewee said: "What works in Africa does not work in the rest of the world". It appears that at least three participants are under the impression that a decolonised curriculum means that "any and all information that comes from any culture except those of black South African origin [is] taken out of the syllabus." In addition to the participant whose definition this is, another added: "For decolonised education to be introduced, the existing system must be overthrown and the people it's supposed to serve must define it for themselves." The researchers judge this to be a very treacherous way of thinking. Under section 3.2 it has been pointed out that the scarcity of theory and evidence-based research from which to draw presents a complication in the pursuit of transforming a colonial and Eurocentric curriculum. Because there is not sufficiently-developed African content to jettison Western education without leaving a void, Wingfield (2017) and Ramogale, in conjunction with the researchers, advise that South African educators develop curricula that build on the best knowledge, skills, morals, beliefs and traditions from around the world. These curricula cannot originate from one country or one continent – be it Africa or Europe. Balance in the form of cross-cultural collaboration is essential. The new curriculum should allow Freud and Fanon to co-exist. With Afrocentrism a means rather than an end, the curriculum should start with the known (Africa) and progress to the unknown (the West and the Rest). In summary, the decolonisation of the curriculum should

therefore not be about destroying Western knowledge but about decentring or deterritorialising it and recovering the culture, history and languages of the African people and using these to inform the present and imagine an alternative, more inclusive future.

4.4. Resistance to change

Like Jansen (2018), two participants (22%) identified resistance to change as an obstacle to decolonising models of academic organisation. This resistance, according to the participants, stems from a number of academics and students in higher education faculties who are content with the status quo and prefer to deal with the devil they know rather than the one they don't. In consequence, these academics and students support an ideology of white supremacy (Pillay, 2015) that sanctifies the values and beliefs of the colonial powers, and they allow colonial relations of production to shape academic practices. The participants demanded that the issue of the curriculum be addressed in Africa's struggle against the legacy of cultural imperialism. A curriculum that is accessible to African people by speaking to their needs and experiences will deracinate the epistemic violence that is inflicted on students – "the subalterns", in the words of one of the participants. However, the researchers assert that decolonising the curriculum is not about throwing out the old in favour of the new and replacing white theorists with black theorists. It is a mind-set that needs to change. Learning has to occur from the inside out – from the known to the unknown, the simple to the complex and the local to the international. The total educational experience should abide by the continuity imperative and consist of more than just the themes and topics covered in a course, but incorporate and integrate the outlooks, values, dispositions and world views of different nations. The new curriculum should be "a cocktail of different inputs" and "a blend of African and Western knowledges," as the two afore-mentioned participants proclaimed. The transformation of the curriculum will then be an impetus for the transformation of entire educational system as well as our society and the economy.

5. CONCLUSION

This article investigated four of the main challenges that exist in the process of decolonising the South African higher education curriculum, specifically lack of content and intellectual authorities, time, the alleged superiority of Western knowledge, and resistance to change. The investigation was performed by a review of literature that explores the collapse of colonial rule pitted against the perpetuation of westernised scholarly supremacy. The theoretical framework of conflict theory and students' protests confirm that change is long overdue. In

addition to engaging with the literature, the researchers conducted semi-structured interviews with nine academics. The academics answered identical questions, but gave unique responses that were germane to their perceptions of the obstacles faced in transforming the content of a curriculum predicated on the assumption of white European intellectual superiority and rationality. The challenges that were identified while doing the interviews aligned with the theories propounded by the literature.

The researchers believe that decolonisation is feasible. A new cross-cultural curriculum should be developed that does not estrange students but builds on their histories, knowledge systems and worldviews and solves problems related to the African continent. The researchers recommend a balanced approach for the South African future: a hybrid curriculum where the youth will have the best education – with one foot in Africa as their stepping stone and with the other making strides on a global platform where they take part as intellectual equals. This curriculum should draw on best practices nationally and internationally and embrace the totality of human knowledge. As the 12th century theologian John of Salisbury put it, it is only by "standing on the shoulders of giants that we can see more and farther than our predecessors, not because we have keener vision or greater height, but because we are lifted up and borne aloft on their gigantic stature."

Future researchers in the field could conduct interviews with a cohort of participants from a range of universities across South Africa. A comparative study could also be carried out where participants are interviewed one year, and again after they have gained more experience in implementing and teaching a hybrid curriculum that makes provision for the inclusion of indigenous knowledge systems and skills in the country's higher education system.

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EVALUATING THE ROLE OF CRIMINAL INVESTIGATORS DURING BAIL APPLICATION

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–Abstract–

Criminal investigators of the South African Police Service (SAPS) are undermined and discredited by society in all spheres of policing sectors. They are shrouded in controversy and often called useless, incompetent and illiterate. SAPS criminal investigators have come under lot of pressure and scrutiny by the media and the public when suspects get bail in a court of law. This article attempts to evaluate and analyse the role of criminal investigators during bail application. This research was carried out utilising a qualitative approach. Purposive non-probability sampling was used because the researchers selected the participants based on their expertise or experience in their field. Thirty-five interviews were carried out among criminal investigators deployed in the Phoenix, Verulam and Tongaat Police Stations of KwaZulu-Natal. The interviews were conducted following a phenomenographic approach to identify the participants' responses.

The challenges the participants perceived or had encountered when opposing bail were explored through in-depth interviews and analysed using thematic analysis.

The findings indicated that, in South Africa, witness views on bail application are not recognised. Moreover, security risk assessment is not being conducted before a suspect can be granted bail. The findings also revealed that prosecutors mostly work in silos during bail application, as criminal investigators are left out. The study recommends that detective commanders should engage consistently with their investigators and discuss a proper preparation of case docket, evidence gathering as well as factors that are considered by court during bail hearings. The study further recommends that the investigators consult constantly with the prosecutors to better advance their relationship and a refresher course is also recommended for investigators in order to keep them up to date with their duties and with what is required from them by the court of law.

Key Words: criminal investigators, bail, prosecutors, witnesses, victims.

JEL Classification: K42

1. INTRODUCTION

There is a lack of cooperation between SAPS investigators and court officials. It is very rare to notice the court officials engaging with the investigators beforehand to identify and rectify shortfalls from the case dockets so that the bail could be declined. As highlighted earlier, the investigators always find themselves on the defensive, where they have to answer questions from the victims and witnesses about why the accused was released on bail. Although it is the constitutional right of an accused to apply for and be released on bail, the victim and witnesses regard it differently. Witnesses are often threatened with harm and therefore they might fear to proceed with cases.

Releasing an accused on bail becomes a problem because the community loses confidence in the justice system itself, regarding the system a failure. Mujkanović (2014:29) mentions that, if a criminal justice system (CJS) guarantees victims and witnesses their rights and provides them with security and a feeling of safety, it can be considered efficient and effective. However, in the South African CJS, no consideration is given to victims. Every victim wants to see the perpetrator or offender of serious crimes convicted for their criminal actions. Each victim in a case is supported by witnesses and the community who want accused persons to be locked away behind bars. It should be recognised that there is a need for friendship advancement between the court and criminal investigators to better

improve their work and defuse the complaints of society. The witness protection programme should be in place, no matter how big or the weight of the case, to make sure that all witnesses are protected by the state. It should be done. However, the witness protection programme has financial implications. It is the mandate of court to make sure that their mandate is executed.

According to the researchers' point of view, many people at a crime scene may be witnesses, but only a few can give evidence that is admissible in court. This implies that the witness who has not been at the crime scene cannot present something that was heard from another person, but can:

- Reconstruct the layout of the crime scene or the overview.
- Provide a full description of the suspects.
- Recollect every activity and the movements of the crime scene.

Witnesses are not always victims, and not all victims can testify by themselves. If the victim is an infant or deceased (a murder or culpable homicide case), those victims cannot be witnesses. Some victims cannot be used as witnesses, such as mentally ill persons, or minor children or infants in rape cases who cannot talk. The South African Police Service (SAPS) (2014) defines a victim as a person who has suffered physical, mental or emotional harm, including economic loss or substantial impairment of their fundamental rights through crime. Some victims of crime are more vulnerable to crime than others, besides the known vulnerable groups of elderly, women and children. Those who are more vulnerable than others are the less privileged, who cannot afford security fences at their homes, who travel by public transport, walking on roads and pathways because they cannot afford to purchase cars. According to the White Paper on Safety and Security (2016:24), there is substantial evidence that those who live in poverty are vulnerable and are affected by crime and violence. The White Paper on Safety and Security further indicates that they are the least able to access the CJS or victim support services and are therefore most at risk, most vulnerable and most affected by high levels of crime and violence.

2. THE RIGHTS OF WITNESSES AS VICTIMS IN RESPECT OF BAIL APPLICATION

The SAPS (2014) describes the Charter of Victims' Rights as a Government initiative that contains the minimum standards of service that victims are entitled to when visiting a police station. The victims are said to have the following rights when visiting a police station: the right to receive information from the police

when reporting a crime, a right to protection, a right to assistance, a right to be treated with fairness and respect for their dignity and a right to offer information during the investigation.

"Care must be taken to ensure that victims understand how the process works and what their rights are, for many years, victims were perceived as simply another witness to the crime" (Wallace and Robertson, 2011:216). Section 7 (1) of the Witness Protection Act No.12 of 1998, states that witnesses who have reasons to believe that their safety or the safety of any person close to them is or may be threatened by reasons of being a witness, may apply for themselves or for any person close to them to be placed under protection. The Act further states that such application may also be made on behalf of the witness by the investigating officer of the case in which the witness testifies. Prosecutors also have a duty to protect witnesses against any harm that may cause them not to testify in court. Part 16 of the Prosecution Directives, as cited Bekker, Geldenhuys, Joubert, Swanepoel, Terblanche and Van der Merwe (2014:15), instructs prosecutors regarding the protection of witnesses, that:-

- Prosecutors must at all times consider the safety of witnesses;
- If a prosecutor has a reason to believe that the safety of a witness or related person is being threatened, he or she may with the consent or on behalf of the witness make an application for protection;
- Where a witness is opposed to being placed under protection, prosecutors are referred to the provision of section 185 of Criminal Procedure Act (CPA) 51 of 1977;
- Where the interest of a witness is threatened as contemplated in section 158 (3) (e) of CPA Act 51 of 1977, the prosecutor must bring an application in terms of section 158 (2) for the witness to give evidence by way of close circuit television if available; and
- Request for defence access to the docket should be opposed where witnesses may be intimidated or tampered with should their identity be made known through disclosure of the contents of the docket.

In other countries, as pointed out by Wallace and Robertson (2011:288) and Daigle (2012:86), the importance of impact caused by criminals to victims has been considered in a victim impact statement (VIS). The VIS is the statement that presents the victim's point of view to the sentencing authority (Wallace &

Robertson, 2011:288). Daigle (2012:86) states that there are reasons to expect the victim impact statement to benefit victims as they give the victim the right to be heard in court and allow their pain and experience to be acknowledged in the CJS. The researchers agrees with the VIS that the victim and witnesses should have an opportunity to say how they feel, as some victims suffer great losses and they want to let the court take cognisance of the impact caused by the criminal in order to give an acceptable sentence. In bail application cases, the victim's expectation is that the criminal be kept behind bars until sentence has been given.

Therefore, the role of the investigator is to inform the prosecutor about the victim's expectations. The investigator is the person that is close to the court personnel and has the duty to introduce the witness and/or the victim to the prosecutor. In a bail application, the court will not know how the victim feels about the release of an accused unless it is mentioned by the investigator. Mokoena (2012:30) points out that, although hearsay evidence is admissible in bail application, it carries less weight than if the persons who have personal knowledge of the facts testify themselves. Mujkanović (2014:7) argues that the consequence of criminal behaviour affects victims in different ways – victims suffer material or moral damages, physical injuries and/or psychological harm.

3. THE SIGNIFICANT ROLE OF WITNESSES DURING BAIL APPLICATION

The witnesses are the centre of the contention in criminal care and they should play an important role during bail application. Although it is the discretion of the court to grant or deny bail, it is imperative that the court consider witnesses when applying its mind on bail. Joubert (2010:42) posits that the presence of witnesses is also vital for a successful prosecution and that consultation with witnesses is crucial, since it will ensure that a witness does not get caught off guard by a question from the prosecutor, or that the prosecutor is not surprised by an answer from the witnesses. The witnesses give guidance whether to oppose bail or not. Mofokeng and De Vries (2012:32) suggest that police detectives and prosecutors should forge relationships and encourage them to get together before a court day. For the CJS to be effective, the acknowledgement of victim or meeting witnesses' expectations is important to reduce unnecessary complaints that destroy the image of the justice system, as one factor leads to another. The purpose of the CJS is to fight crime and to punish the offender. In the same way, another purpose of the CJS should be to show the victim or witness that something has been done. As

mentioned above by Mujkanović (2014:29), the CJS should provide witnesses with a feeling of safety in order to be considered effective.

If victims are not happy about the safety measures, they might stop reporting any criminal activity. This will strengthen criminals' resolve, because they would know that they would not be reported. Once it gets to such a stage, crime will escalate until it affects the economy so negatively that international investors will not want to invest in the country where safety is unpredictable, or crime levels are high. The Institute for Economics and Peace (2014:33) indicates that crime and violence have significant multiplier effects on the economy by depressing savings, investments, earnings, productivity, labour market participation, and tourism. Daigle (2012:85) is of the view that when police meet victims` expectations, they report high levels of satisfaction.

If victims are not satisfied about how matters are handled by the CJS, they may contact the department that deals with victims of crime, the Community Safety and Liaison, which offers victim empowerment programmes. According to the Department of Community Safety and Liaison (2011), the directorate established victim-friendly facilities at priority police stations that would ensure that:

- Victims are treated in a professional, private, sensitive manner and referred to support services in the community.
- A win-win situation is created for victims and the police.
- The production and distribution of information Z-cards in the response to the State of the National and Provincial address in intensifying the implementation of the Victim Charter to help victims of domestic violence.

The SAPS (2014) defines the victim-friendly service as a service where the dignity and rights of victims are protected, and the victim is empowered and not subjected to secondary victimisation by the inefficiency of the members of the CJS. If one of the requirements in the bail application is the victim's or witness's opinion on bail, they will be satisfied how the matter is handled. Knowing that the victim impact statement is used during the sentencing processes to assist in the verdict, the view of victim/witnesses can also be vital in decision-making during the bail application. Under the South African Criminal Procedure Act 51 of 1977, section 60(10), the court has the duty to weigh up the personal interests of the accused against the interests of justice. In this case, the interests of the victim, witnesses and the community are not weighed up or prioritised by the Criminal Procedure Act when it comes to the granting of bail.

When called upon to testify during a bail application, the investigating officer should bring along the victim who is intimidated by the release of the accused and ask the court to hear the version of the victim before a bail decision is made. If it is not possible, the investigating officer can obtain a further statement from the victim outlining events that will inform the court about the dangers of releasing the accused. This is vital, because the bail application is done using the first reporting statement obtained by the community service centre (CSC) officials, which only deals with the incident at hand, and prior incidents are not mentioned or reported, especially in domestic violence cases. According to Gilbert (2010:37), victims of crime may choose not to report violations to the police if they feel that nothing will be done or if investigative functions do not occur, such as the recovery of exhibits and arrest of the assailants.

4. THE ROLE OF CRIMINAL INVESTIGATORS DURING BAIL APPLICATION

Although investigators do not have the final say on the granting of bail, it is essential that their role should have an effect and assist the court to take appropriate decision when dealing with bail. According to the investigators interviewed, in some cases they have no knowledge that the suspect is out on bail. This poses a risk to witnesses' safety as well as to investigators. All investigators interviewed indicated that there was no witnesses were present at any of the bail applications they attended. In some instances, they (investigators) were also not consulted when a bail application was conducted; therefore, they were unable to inform the witnesses about the outcome of the bail application. This comes as a surprise to both investigators and witnesses when the accused is out with bail without their knowledge.

5. ACCUSED ON BAIL BEING A THREAT TO THE WITNESSES

The preamble to the Witness Protection Act 112 of 1998 states that the Act was established for the protection of witnesses to regulate the powers, functions and duties of the Director. This means that the safety of witnesses was a concern and there was a need for witness protection. The Department of Justice and Constitutional Development (DOJ & CD) (2012/2013:407) explains that the office for Witness Protection provides a support service to the CJS by protecting threatened and intimidated witnesses and related people by placing them under protection. This implies that the state is aware that witnesses may be in danger, because the witness protection programme exists to protect the witnesses. However, the researchers is of the opinion that witness protection is not enough.

Criminals should be kept away from society and from witnesses. Witnesses are intimidated by the free movement of their offenders. The conditions that are in place for witnesses to be kept safe in witness protection are a torture themselves. Witnesses who are under witness protection live in isolation away from their families, they do not work and cannot freely connect with the world. In fact, they seem to be in custody themselves.

Gilbert (2010:117) states that victims of particularly violent crimes, in which their lives may have been threatened, may experience such fear that they may hesitate to blame the criminal. Therefore, if the accused is released on bail, the witness tends to fear to continue with the case, fearing to face the accused in court and then see him outside the court after appearing. The danger of offenders released on bail has been a concern even internationally. Davies at al.(2010:288) point out that the result of increasing concerns about the possibility of dangerous offenders being released on bail, culminated in the Bail Act of 1993 in which the prosecuting authorities limited rights to appeal against bail decisions made in court. The accused that is out on bail can be a threat to the witnesses. The accused can intimidate and influence witnesses not to testify against them in court. The accused can threaten with violence and make promises of compensation to the witnesses in order to stop them from testifying.

Wallace and Robertson (2011:14) are of the view that a victim may be blamed and seen as responsible for the crime and that a negligent act by a victim should not be considered as an invitation to be a crime victim. This is normally a rationale or excuse made by criminals in order to escape blame. In rape cases, victims are blamed for wearing short or mini-skirts or being drunk at the time of the offence. Other victims are blamed for walking at night, which is intended to discredit the witness`s evidence by showing the character of the witness. Davis and Snyman (2005:101) mention that even when a suspect has been arrested, victims are vulnerable to intimidation, assault and even murder from suspects after they have been released on bail. The investigating officer has a duty to prove that the accused is not eligible to bail by indicating if the accused has previous convictions or pending cases, by mentioning if the accused address has been verified. The investigator should present a proof of flight risk, for instance whether or not the accused was cooperative during arrest or tried to escape. The investigating officer can point out if the accused can cause harm to witnesses if released on bail.

Davies et al. (2010: 284-286), the international authors, maintain that both the police and the courts can make a decision about holding an accused person in

custody prior to conviction and that the police must decide whether to release arrested persons on bail or to detain them. Although it is not up to the police to decide, however the police can withdraw from opposing bail letting the court to decide.

Davies at al. (2010: 284-286) further indicate that after 36 hours, accused persons must appear before a magistrate in court, who may return them to police custody for a further 36 hours and, after this time, they must again be returned to the court. Davies et al. (2010) illustrate international detention procedures. The South African detention procedure is the same, but the duration is different since South African law states that the first appearance in court should be within 48 hours. This procedure is followed by the criminal investigating when they apply for the seven-day remand of an accused person. After the seven days, the accused must appear in court again for a formal bail application and can be released if the investigating officer finds no evidence to deny bail.

There are accused who become witnesses by turning against their co-accused and give incriminating evidence in favour of the prosecution. These witnesses may not be safe if the accused is out on bail. State witnesses are mentioned in section 204 of the Criminal Procedure Act 51 of 1977, which authorises witnesses to give incriminating evidence in favour of the prosecution. Section 204 of the Criminal Procedure Act 51 of 1977 is about an accused who is used as a witness against the other accused, thereby escaping prosecution. Such witnesses might be intimidated. The investigating officers should ensure that these witnesses are protected until the trial is over. They also require protection like that of the independent witness.

6. COURT REASONS FOR GRANTING BAIL AFTER INVESTIGATORS OPPOSE BAIL

The court does not grant bail in cases where the evidence presented is insufficient. The prosecution must have sufficient evidence against the accused. The investigator must prove to the court that if the accused is released, there will be challenges in finalisation of the matter. Mokoena (2012:27) points out that the strength or weakness of the case plays a crucial and decisive role in the granting or refusal of bail. The Criminal Procedure Act 57 of 1977, section 60(9), states that the court shall decide the matter by weighing the interests of justice against the right of the accused to his or her personal freedom and, in particular, the prejudice he or she is likely to suffer if he or she were to be detained in custody, taking into account, where applicable, the following factors, namely:

- The period for which the accused has already been in custody since his or her arrest;
- The probable period of detention until the disposal or conclusion of the trial if the accused is not released on bail;
- The reason for any delay in the disposal or conclusion of the trial and any fault on the part of the accused with regard to such delay;
- Any financial loss which the accused may suffer owing to his or her detention;
- Any impediment to the preparation of the accused's defence or any delay in obtaining legal representation which may be brought about by the detention of the accused; and
- The state of health of the accused.

Gilbert (2010:542) indicates that police investigators assist the court by providing information that can help a judge to make a just establishment of innocence or guilt. Section 36 of the Constitution; the Limitation Clause, allows the courts to infringe the rights set out in the Constitution, such as the right to freedom. Looking at the notorious femicides occurring nowadays, this is one right that should be infringed in the case of femicide suspects, since it defies reason that the courts would release an accused on bail after only a few months of detention, if not weeks. Femicide is the killing of a woman by her male partner.

7. CRIMES COMMITTED BY ACCUSED WHO ARE OUT ON BAIL

This kind of act is mostly experienced by domestic violence victims and witnesses, when the criminals know where to find their victims. Davies and Snyman (2005:102) mention that, following the reporting of the offence, the victim or witness may face further victimisation at the hands of the perpetrator, and even after having served a sentence, the perpetrator may continue with his or her hostility towards the original victim or witness.

"The murder suspect, who allegedly shot his lover following a quarrel in Tongaat, was *released* on R2000.00 bail at the Verulam Court, while protesters gathered outside the building strongly opposing the bail application" (Naidoo 2014:1). In this case, the accused was released on bail, despite the fact that the community or protesters were opposing the bail. Whilst the accused was out on bail, he met the victim's father outside court and asked him "are you happy that I'm going to jail?" The victim's father was intimidated. Gilbert (2010:124) argues

that criminal investigators should assure witnesses that any threats or acts of intimidation against them will be investigated and resolved by police action. The authors add that, to further ensure the safety and confidence of witnesses, witness protection units have been proposed. As a result of the court granting bail when the investigator is opposing bail, the accused can commit another crime while on bail. In a recent case in 2018, a woman in Nongoma, KwaZulu-Natal, was killed by her partner who was out on bail in the rape case (Mthethwa, 2018). In this case, the suspect was charged with rape since he had shoved the knobkerrie into the woman's private part. He was later released on bail; he then went to the victim's residence, where he set the victim on fire by necklacing her. She later died in hospital. In this case, the court had clearly failed to protect the witness.

8. METHODOLOGY AND SAMPLING

The qualitative research approach was applied in this paper and non-probability sampling was employed to collect data (as described by Mouton and Babbie 2013:270). According to Leedy and Ormrod (2014:152), non-probability sampling is used when fewer units are analysed and in this paper, 15 investigators were interviewed. Literature forms a major part of this paper, as well as integrated empirical data from the investigators. Again, Leedy and Ormrod (2014:145) regard purposive sampling as an appropriate sampling method for a targeted population with particular expertise and experience on the subject matter. The researchers used purposive sampling, as they intentionally selected the investigators with such required knowledge and expertise in bail application for in-depth information.

9. FINDINGS

The researchers discovered the following:-

- It has been identified that, in South Africa, witnesses are not called in court during bail application. Witnesses' views on bail application are not recognised.
- This is a well-known problem which is confirmed by the existence of the Office of Witness Protection. The court only learnt that witnesses are in danger once the threat and intimidation are reported.
- A security risk assessment should be conducted in order to confirm the risk faced by victims and witnesses; the assessment should be performed by witness protection security and the victim empowerment office, using their reported incidents.

- The role of investigators is not only to appear in court and oppose bail, but the role includes knowledge of certain laws and the relevant statutory provisions that govern the entire proceedings.
- The safety of witnesses and the community at large is the responsibility of many other role players in the criminal justice system, including the investigator.

10. RECOMMENDATIONS

The researchers recommend the following:-

- It is recommended that detective commanders should engage consistently with their investigators and discuss a proper preparation of case docket, evidence gathering as well as factors that are considerable by court during bail hearings.
- It is recommended that the investigators consult constantly with the prosecutors to better advance their relationship.
- The accused should be treated as a threat to the witness at all times, especially those with previous convictions and those who committed serious offences. Witnesses should always be assumed to be in danger.
- Witnesses should be involved in bail application, especially in cases where the accused is known by the witness. Witnesses should be called to testify for their own safety.
- Regardless of the directives to the prosecutors, the prosecutors should continue guiding the investigation and only the magistrates should be left with independent and unbiased decisions.

11. CONCLUSION

Witnesses will always be in danger if the accused is released on bail. Without the required facts, the lives of victims and witnesses are often in the hands of investigators and the CJS as a whole. The prosecutor is said to be neutral and is not supposed to take sides; therefore investigating officers must know that they are on their own. Gathering interim evidence will not work if the investigator believes that the court will wait for further investigation. Insufficient evidence linking the accused with the crime committed is said to be the main course of granting bail to the accused. Witnesses and investigators should form part of bail applications for them to have a full view of the outcome of the court.

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GENDER EQUALITY IN THE SPORT SECTOR: THE CASE OF SELECTED SOUTHERN AFRICAN COUNTRIES

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─Abstract─

Africa is a patriarchal society where men dominate those sectors that are considered masculine. Sport is traditionally considered a masculine activity, hence it still creates gender segregation; side-lining women from participating in sport activities and being represented in sport management structures. The aim of this article is to explore the status of gender equality in the sport sector in the Southern African context. The following 10 countries constitute African Union Sports Council (AUSC) Region 5: Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia, and Zimbabwe. Following a multidisciplinary research perspective, the author conducted a literature survey, document analysis, and desktop review of the challenges and realities of gender equality in the sport sector covering selected AUSC Region 5 countries in Southern Africa. Utilising a qualitative research approach, this article explores the need for gender equality in the sport sector. The findings confirm that although there is a gender-biased approach in the sport sector that can lead to social and economic development of society, it can be a platform to empower girls and women; however, a stereotypical mentality, socioeconomic barriers, and cultural norms still restrict female participation and representation in sport-related activities and processes. This article discusses these challenges and offers solutions for improvement. The article discusses that there are transformative changes in the world that force social inclusion of women in all aspects of life, including sports. These transformative changes require governments and sports organisations to reform their policies to make them more gender inclusive. This is an aspect of ongoing debates in country-specific contexts.

Key Words: Gender, Gender equality, Women in development, Sport sector, African Union Sports Council, Southern Africa

JEL Classification: Z29

1. INTRODUCTION

The concept "gender", according to Vyas-Doorgapersad (2017), is "linked to the physiognomy separating male and female, and is physically constructed". Gender equality can be conceptualised as a problem of achieving equality as sameness (this is linked to the strategy of equal opportunities) (Verloo, 2007). The benefits of sport participation include moral reasoning (caring versus fairness), socialisation, competition, health and fitness, and leadership traits (masculine versus feminine) (Kelinske, Mayer & Chen, 2001). The feminist perspective on sport, according to Hylton and Totten (2001), reinforces patriarchy and traditional masculine and feminine values. In fact, it often tends to promote masculine values over feminine values. It can also, however, act as a site for women, or men, to challenge these traditional values.

Feminist ideologies have various developmental approaches, such as Women in Development (WID), Gender and Development (GAD), and Women and Development (WAD). The WID approach, according to Visvanathan (1997), is based on the modernisation theory that assumes that traditional societies are authoritarian and male-dominated and that modern societies are democratic and egalitarian. The WID perspective, developed in the early 1970s, highlights "the fact that women need to be integrated into development processes as active agents if efficient and effective development is to be achieved" (Vyas-Doorgapersad & Surujlal, 2018:297). The WID is associated with liberal and progressive thought patterns and hence, according to Vyas-Doorgapersad and Surujlal (2018:297), "paved the way towards the WAD school of thought, which considered women as part of the developmental process. This realisation demanded scholars to debate on issues surrounding women's exploitation, unequal rights, and suppression, therefore demanding implementation of developmental approaches to correct the situation. The GAD approach incorporates both men and women, stating that women are equally responsible to support families at social and economic levels". This article utilises the WID approach as its theoretical framework. The aim of this approach is to empower women through integration and mainstreaming development processes. This empowerment is imperative to gain personal, social, interpersonal, professional, economic, and political power of disadvantaged

groups in society (in this study, women) for equality and transformation. This resonates with the United Nations' (UN) 2030 Agenda for Sustainable Development, which emphasises sport as a significant contributor of Sustainable Development Goal (SDG) 5, which aims to achieve gender equality and women's empowerment.

2. GENDER IN SPORT: AN OVERVIEW

The aspects of gender mainstreaming and equality demand gender inclusion in sport, and hence challenge deep-rooted traditional and societal-based gender norms and values. Although men are given financial opportunities and societal approval to play, represent, and participate in sport activities, the role of sport in gender equality needs to be emphasised. According to the Swiss Agency for Development and Cooperation (2008), there are "ways in which sport can help promote broader gender equality objectives (e.g. rights and empowerment). Sport can give women and girls access to public spaces where they can gather, develop new skills together, gain support from others and enjoy freedom of expression and movement. It can promote education, communication, negotiation skills and leadership, all of which are essential for women's empowerment". These benefits are clearly stated in a document titled *Sport and the Sustainable Development Goals: An Overview Outlining the Contribution of Sport to the SDGs* (UN Office on Sport for Development and Peace, 2019) as stated in Box 1.

Box 1: Sport and SDG 5

- Sport can be a powerful platform for advocacy and awareness raising for gender equality. It can contribute to abolish all forms of discrimination against women and girls; human rights-based rules of a sport can help to replace culturally discriminative norms that exclude women and girls from sport.
- While the rights of women and girls to participate in sport as athletes or spectators are not respected in many countries, sport can help to foster gender equality in countries and regions where women are discriminated against.
- Addressing current gender inequalities across participation, performance, and leadership in sport can make a valuable contribution to this goal. Sport can be used to address constricting gender norms and to promote equal participation of girls and women in sport.
- Sport and sport-based community programmes in particular can, if designed inclusively, cause positive shifts in gender norms and promote gender equality.
- Sport can foster increased self-esteem and confidence of women and girls, empower them, and develop skills needed to become equal participants and leaders in their communities. Through sport-based programmes, women and girls can be equipped with knowledge and skills on health, on how to live a healthy and active lifestyle, on how to act in case they experience violence, on employability, and with leadership skills needed to progress in society.
- Sport can provide safe and fair environments for women and girls. A safe playing area for girls is especially essential, for instance in refugee camps.
- Sport can raise awareness and address abuse and gender-based violence within sport.
- Men and boys can be engaged in achieving gender equality in and through sport. Sport can promote better gender relations and cooperation.

Source: UN Office on Sport for Development and Peace (2019)

The "positive outcomes of sport for gender equality and women's empowerment are constrained by gender-based discrimination in all areas and at all levels of sport and physical activity, fuelled by continuing stereotypes of women's physical abilities and social roles. Women are frequently segregated involuntarily into different types of sports, events, and competitions specifically targeted to women. Women's access to positions of leadership and decision making is constrained from the local level to the international level" (UN, 2007). The reasons could be the culture of a society where stereotypes do not allow wives to play sports. Don't have women in elite sports because men don't allow them to play. Girls are not allowed. It is taboo in some communities (Fasting, Huffman & Sand, 2014). Another aspect of culture that is related to the gender order in society, according to Fasting et al. (2014), is the gender-based violence towards girls and women occurring in sport, and that is experienced as a barrier towards participation and involvement. These barriers are associated with the patriarchal context of a

country. This statement is substantiated by the views of Flintoff and Scraton (2002, cited in Shehu, 2018:9), who emphasise that "the fact that sport has a large male following worldwide has been linked to the patriarchal ideology which divides the social world into dualistic gendered spaces, positions, traits and dispositions that are presumably clear and natural". This dominant ideology, according to Shehu (2018:9-10), defines "men in opposition to women and therefore declares certain domains such as the home as female and others such as sport and public spaces as male. It goes without saying that this naturalisation of sport as a male territory for nurturing hegemonic masculine qualities tends to exclude from the sport arena other bodies that are marked, gendered, sexed, or classed as female or feminine". Shodhganga (2008) emphasises that "sport is traditionally associated with masculinity. In many societies, it is considered inappropriate for women to engage in sports, and women who do may be perceived as masculine. Conversely, men who do not engage in sports or who are not talented in sports may be labelled as unmanly. Yet, it is evident that there is no one masculinity or femininity, and sport could provide a space where masculinity and femininity are re-negotiated rather than re-affirmed in their dominant acceptation". It can therefore be highlighted that regarding gender, women are more restricted and marginalised.

In an African context, the factors that affect women's participation in the sport sector vary from patriarchy, poverty, conflicts, suppression, and gender-based violence, to state a few. These "issues are embedded in the general social, cultural and political landscape of Africa so are diverse and quite complex. For instance, one of the biggest challenges on the continent is armed conflict which causes displacement, compromised safety and limited access to basic services and resources. In such cases, sport and recreation is the last thing on anyone's mind" (Mwambwa, 2013). There are factors that cannot be ignored, such as lack of physical education in schools, training facilities, finance and sponsorships, etc. Carol Garos (2000:2), Secretary General of the African Women in Sport Association, adds that "Africa segregates against women and girls in all activities of our societies, including sport. For instance, there is a strict dress code which virtually prevents the participation of women in sport activities, particularly in our rural areas where cultural norms are strictly enforced". In order to explore these challenging issues, many conferences have been organised worldwide that raised discussions regarding the evolved status of women in sport.

The first World Conference on Women and Sport was organised in 1994 by the British Sports Council, which "endorsed the Brighton Declaration on Women and Sport. The Declaration provides the principles that should guide action intended to increase the involvement of women in sport at all levels and in all functions and roles" (International Working Group on Women and Sport [IWG], 2018a). The second IWG World Conference on Women and Sport was held in Windhoek, Namibia, in 1998. The conference discussed how the Brighton Declaration and the Windhoek Call for Action were to be promoted and monitored moving forward from the Windhoek Conference (IWG, 2018b). The third IWG World Conference on Women and Sport was held in Montreal, Canada, in 2002. Following the conference, the Montreal Communiqué was issued to summarise the conference's outcomes and recommendations for future action (IWG, 2018c). The fourth IWG World Conference on Women and Sport was held in Kumamoto, Japan, in 2006. From Montreal to Kumamoto, progress reports point "to many inspiring and innovative activities taking place, often in the face of subtle and sometimes fierce opposition, but all leading to creating opportunities for women in sport and physical activity" (IWG, 2018d). The fifth World Conference on Women and Sport was held in Sydney, Australia, in 2010. The conference aimed to "build a global community of practice for women, sport and human rights" (IWG, 2018e). The sixth IWG World Conference on Women and Sport was held in Helsinki, Finland, in 2014, where "the participants identified the persistent barriers that impede equal opportunities for women and girls to be involved in sport at all levels and in all functions and roles of sport and physical activity" (IWG, 2018f). The seventh World Conference on Women and Sport was held in Gaborone, Botswana, in 2018. The issues raised and discussed were "girls and women need equitable opportunities, quality coaching and safe facilities, safe and affordable access, and leadership role models at all levels of sport to realise acceptance as athletes and citizens and full inclusion and celebration of their participation" (IWG, 2018g).

The Gender Action Plan was developed as part of the AUSC [African Union Sports Council] Region 5's (the former Zone VI of the Supreme Council for Sport in Africa, considered as a case under study) commitment to gender mainstreaming. *Sport for Development* is one of the seven strategic priorities of AUSC Region 5 (Strategic Plan 2013-2018), and a strategic objective under Sport for Development is *Equity and Inclusion*, with emphasis on the importance of involving more girls and women in sport (Fasting et al., 2014). The Strategic Plan

aims, among others (Fasting et al, 2014), to ensure all Member States and Confederations establish policies that promote gender mainstreaming, gender equity and inclusion in sport. Additionally, it also aims to advocate for the implementation of sustainable sport and recreation programmes, and gender empowerment initiatives that will contribute to safe sport and increase participation at all levels by the girl child and women (Fasting et al., 2014).

Despite all these events, conferences, and discussions, "[t]here are still, everywhere in the world, too many highly accomplished women who are refused access to sport, or socially stigmatized when they decide to excel in a sport. Similarly, women face discrimination at all levels, and continue to endure violence and abuse. Gender inequality persists among decision-making bodies, technical occupations, the media, and in the awarding of sponsorships and prizes" (International Olympic Committee **[**IOC], 2018a). "Title IX pioneers in the USA identified gender-minded leaders as the driving force behind legislative redress based on unequal access and opportunity in public sport spheres" (Hardin & Whiteside, 2009, cited in Burnett, 2018). "Individuals or organisations with political power are mainly responsible for the equitable distribution of resources. For change to happen, all dimensions of gender inequality should be addressed at all levels of engagement – from social relationships at the individual, organisational and societal levels" (Burnett, 2018). This article aims to explore the status of gender equality in sport management in selected AUSC Region 5 countries. Future research will discuss the rest of the countries, with the aim of creating a comparative database and analysis.

3. THE CASE OF SOUTHERN AFRICA (AUSC REGION 5)

The information under this section is qualitative in nature and takes an exploratory approach that, according to Morse and Field (1995, cited in Surujlal & Vyas-Doorgapersad, 2015:83), is "appropriate to investigate and get a greater understanding regarding a phenomenon" under investigation. The qualitative research approach is significant as it emphasises the careful and detailed description of social practice (Sibanda, 2015; Bangani, 2019). The research entailed desktop analysis, including regional information through official records, articles, and strategy documents. The methodological approach includes specific dimensions of unobtrusive research techniques, such as document analysis, to explore that challenges still exist in the following Southern African countries regarding the segregation of women in the sport sector:

Botswana: Women in Botswana, according to the chairperson of Women and Sports Botswana (WASBO), Grace Muzila, "[s]till face challenges in accessing, participating and benefiting from sport and physical activity … the issue of discrimination against women and girls in sports was a matter of concern, and that inequality between women and men was a growing concern for sports policy makers and organisations" (quoted by Bakang, 2017). To improve the situation, WASBO, which is a national structure, aims to create opportunities to increase the role and participation of women and the girl child in sport through advocacy, awareness, capacity building, and national co-operation. WASBO operates under the umbrella of the Botswana National Sports Council (BNSC), which is the governing body responsible for policy coordination and implementation (Department of Sport and Recreation, 2004, cited in Keaney, 2006). WASBO, as stated by Keaney (2006), is charged with policy coordination and implementation with regard to women's sporting issues and operates as a gender equity 'watchdog' over the thirty national sports associations, whose roles are policy implementation for sport development within their respective sports.

Lesotho: Gender representation is a concern in Lesotho because gender inequality still disadvantages women over men in all socioeconomic and political spheres. Patriarchy, cultural norms, customs, religious practices, and both normative and structural discriminatory practices are usually the main factors that perpetuate gender inequality and mitigate empowerment, especially of women and girls (Kali, 2018) in all sectors, including sport. The "Minister of Sports, Mathibeli Mokhothu, launched the Future Olympic Women Leaders' Development (FOWLD) programme in Maseru as part of empowering women through sport. The programme is aimed at sharpening women's leadership skills in the administration of sport, and mentoring the country's young women in areas including communication and sport" (*Lesotho News*, 2015).

Namibia: The "Namibian Women in Sports Association (NAWISA) was formed in 1998 through the Ministry of Gender and Equality and aims at promoting gender equality in sport. NAWISA slams sport administrators and federations for their failure to develop sport amongst women" (Uugwanga, 2014). NAWISA president, Pendukeni Iivula-Ithana, emphasised that "poverty, heavy domestic demands and a lack of physical education prevents women's participation in sports" (quoted by *Namibian Sun*, 2018). Iivula-Ithana further stated that "safety concerns, a lack of accessible transport and inadequate sport and recreational facilities are also among the factors that prevent women's participation in sport. In

addition to those challenges are cultural norms and constraints which prevent girls and women from being physically active" (quoted by Namibian Sun, 2018). "The Sports for Development project uses sport to provide children and youth with valuable skills and opportunities that they need to succeed in life and contribute to their communities. It was founded in Khayelitsha, a South African township, in 1991 and has been operating in Namibia since 2000. One of the Namibian Sports for Development programme's strongest legacies is the strong base of local volunteers who are trained in sports coaching and leadership, and organised sport in the target communities and increased involvement of girls and women" (Good Hope Studies, 2018:1).

South Africa: In the South African context, the reasons behind the lack of female representation in sport governance could be that "the management styles of female executives in SA sport indicated a perception of non-competency regarding top management skills. Women simply do not regard themselves as competent enough to deal with sports management issues on top level. The lack of female role models in sport decision-making positions" (Goslin, 2006, cited in Vyas-Doorgapersad & Surujlal, 2018:299) "can also be a contributory factor behind the cause of gender inequality in sport governance. In South Africa, culture, traditions, and tribal heritage are considered as obligatory norms to follow", and hence, according to Vyas-Doorgapersad and Surujlal (2018:299), "women cannot take appropriate decisions regarding their career in sport management and governance. South Africa has also implemented a few initiatives to advance female involvement in the sport sector. These initiatives include the National Strategy for Women and Sport, which focuses on the grassroots level and proposes advanced female participation in sport" (see *The Conversation Africa*, 2018). There is also a National Charter for Women and Sport South Africa (WASSA, 2011, cited in Singh & Naidoo, 2017:1411) that "calls on decision makers (government, non-governmental organisations, all sport organisations, and individuals) to commit to equality and set up policies, structures, and mechanisms to achieve the aim of developing a sporting culture that enables and values the full involvement of women in every aspect of sport and recreation" (also refer to Vyas-Doorgapersad & Surujlal, 2018).

Swaziland: As reported by Carnegie (2018), sport for women in Swaziland is not recognised "as employment creation. Culture dictates that women belong in the kitchen, not on the sport field. Women in rural communities are not allowed to wear appropriate sport gear. Social norms, values, and beliefs become a barrier to

women sport. The Swaziland Social Transformation Network (SSTN) submitted an application to the Swaziland government to have the youth-development-through-football approach implemented in cooperation with the National Football Association Swaziland (NFAS)" (Youth Development through Football [YDF] Project, 2018). The "transformation network aims to contribute to the economic and social transformation discourse of governmental and non-governmental institutions by facilitating and increasing effective participation and engagement in development policies that impact on human potential. The network focuses on applied research and knowledge and skills development and is working in the area of public health and health systems reform, governance, gender, socio-economic rights, and social development in Swaziland" (YDF Project, 2018).

All the initiatives in selected AUSC Region 5 countries are aligned with the WID approach as they empower women through integration and mainstreaming development processes.

4. RECOMMENDATIONS

Internationally, the Women in Sport Commission (WSC) was established "to promote equal opportunities for girls and women to participate in and benefit from sport and physical activity. Some of the responsibilities of the WSC are to advise on advocacy for increased participation of women athletes" (IOC, 2018b) and improved equity in sports governance and leadership positions. Other aims of the WSC are associated with "promoting the rights and well-being of women and girls in and through sport and greater access to sport for girls and women; recognition of achievements of individuals and organisations promoting women in and through sport, including through the Women and Sport Award; promotion of the use of sport as a tool for gender equality and empowerment and raising awareness of harassment and abuse in sport; and supporting the development of women's skills in management and leadership" (IOC, 2018b). These aims can be achieved through adequate training and capacity-building programmes to enhance sports capabilities for progression. These initiatives are, however, apparently limited to the Olympic Movement, and are hence required to be incorporated in all sports activities.

Another initiative, the IOC Gender Equality Review Project, is a tangible outcome of Olympic Agenda 2020 that emphasises gender balance. This project is a joint initiative of the IOC Women in Sport and Athletes' Commissions (IOC, 2018c). The project was endorsed in February 2018 hence its impact will only be able to

be assessed in the near future. This nature of initiatives is required to be covered under other sports movements that are far more but are non-Olympic. The Olympic programme caters for fewer than 30 sports. Future research must study the documents of the international governing bodies of non-Olympic sports to investigate the status of gender balance in their charters and policies.

The focus of the article is on AUSC Region 5, which "in 2019 joined forces with the Association for International Sport for All (TAFISA) in embarking on its journey of mentoring and preparing more women to take up leadership positions at various federations and commissions of member states" (*New Era*, 2019:1). A seminar was organised in Johannesburg, South Africa, in March 2019, under this partnership, with the objective to "extensively touch on AUSC Region 5's Women Leadership Programme (WLP), which is aimed at increasing the number of women occupying leadership positions in the Region from the current 20 percent to 40 percent by 2028 [and] will lead Sport for All and Gender mainstreaming mentorship programmes in their own countries together helping to build a network of women leaders in sport in the Region" (*New Era*, 2019:2). These initiatives further confirm the WID approach of empowering women through development processes.

5. CONCLUSION

This article aimed to open scholarly discussions on exploring issues of gender inequality in the sport sector. The article discussed challenges that supress women in sport-related activities, processes, and structures. The interventions to mainstream gender WID processes in selected Southern African countries were explored. The article argued that the sport sector requires gender balance, gender mainstreaming, and gender-based capacity-building measures for gender equality and women's empowerment. The article recommends that gender equality must be considered in various aspects of sports, such as the recruitment of female coaches, selection of female athletes, equity in sports governance structures, access to training opportunities, and promotion to sports leadership positions, to suggest a few. The sports organisations also need to develop networking with schools to promote physical education for girls, and create awareness at workplaces regarding the benefits of sports for the enhanced mental, physical, and psychological wellbeing of women. This approach may have a positive impact at a professional level (micro) and societal level (macro). This statement is substantiated by the information published in a report titled *Women, Gender Equality and Sport* (UN, 2000), which highlights that "the participation of women

and girls in sport challenges gender stereotypes and discrimination, and can therefore be a vehicle to promote gender equality and the empowerment of women and girls. In particular, women in sport leadership can shape attitudes towards women's capabilities as leaders and decision makers, especially in traditional male domains. Women's involvement in sport can make a significant contribution to public life and community development". Most importantly, the role of the media in creating a positive image for women in sports is insignificant. This aspect is highlighted by Gender Links (1970), which emphasises that "the media in general tends to be partial towards men, covering women mainly as subjects of sensational stories, for instance as victims of disasters or violence. Moreover, media often excludes women from coverage in traditionally 'male spaces', such as economics, conflict and sport, and tends to focus on their experiences in more traditionally women's spaces, such as in the home or related to social services". This image and scenario need refinement and the media can have slots dedicated to women's sports and women in sports telecasting success stories to motivate young girls to join sports.

This article offers recommendations based on the available literature; however, the information reviewed is still considered limited in its approach due to challenges such as that the desktop study relied heavily on information available via Internet sources. In this regard, it was realised that not all selected countries have well-functioning government pages from which to draw information regarding their ministries of sports. It was a challenge to draw statistics of women in sport governance and leadership, and in the sport sector. The time to compile information of such a wide-ranged nature was also a challenge. Lack of information available on government websites, Internet pages, and country-specific databases for statistics on women in the sport sector hampered the achievement of the overall aim of the article. This also restricted the author from conducting online interviews as websites and web pages are not available to contact the relevant personnel. This is considered a limitation for this study. The article is therefore considered an effort to raise a debate and awareness regarding gender inequality in the sport sector, which is not a widely discussed topic, hence requiring comprehensive and ongoing research, especially in the domain of public management and policy. The author aims to conduct future research on gender equality covering the West, North, Central, and East African regions, thereby developing a comparative database of country-specific public policies, to further contribute to the field of sport management and gender studies. It is also aims to

incorporate varied aspects linking to the topic; for example, the salaries of women in sports governance in comparison to men, gender equality in terms of financial compensation in the sport sector, etc. in African countries.

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PERCEIVED BARRIERS TO EMPLOYMENT: A CASE OF FEMALE HOUSEHOLD HEADS IN A SOUTH AFRICAN TOWNSHIP

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─Abstract ─

A survey of literature indicates unemployment as one of the most important challenges facing post-apartheid South Africa. The country's unemployment rate has been consistently above 20 per cent and this makes finding employment difficult. There is great variation in female labour force participation across the world, with females experiencing a higher unemployment rate than males, and South Africa is not immune from this trend. This research paper is based on the findings of a household survey conducted in the township of Bophelong, South Africa. The aim was to identify the factors that influence unemployment among female household heads (hereafter referred to as female heads). We conveniently surveyed 300 female heads in order to determine their general employment status, and the perceived barriers to getting employment and found that 72 per cent of the sampled population were unemployed. Descriptive statistics and regression were used to assess the relationship between barriers to entry into the workforce and other demographic factors. The results showed that most unemployed female heads within Bophelong perceive that the most prominent barriers are lack of qualifications, lack of experience, lack of skills and failure to conduct themselves properly during an interview. Findings of this study established a relationship

between the demographic factors and barriers to entry into the workforce with female employment status. These findings are important for the formulation of policies to alleviate the seemingly high unemployment rate amongst this segment of the population. These unemployed female heads of Bophelong believe that an improvement in their education levels; personal skills and/or general literacy levels will increase their chances of gaining employment.

Key Words: Barriers; education; employment; female; township;

JEL Classification: R11; P46

1. INTRODUCTION

(International Labour Organization, 2019) estimated that 172 million people globally were unemployed in 2018 and the continued increase in macroeconomics risks has had a negative impact on the labour market of most countries. There is a projection of a further increase in the number of unemployed people to 174 million in 2020. This is alarming, especially for developing countries such as South Africa. South Africa's unemployment is amongst the highest in the developing world with the unemployment rate that has been above 25 per cent for over a decade following the democratic change in 1994 (Chang, 2014). The Quarterly Labour Force Survey (QLFS) notes the official unemployment rate of 29 per cent for the 2nd quarter of 2019 (Statistics South Africa, 2019). The consequences of this high unemployment rate pose significant challenges ranging from diminished standards of living to degradation of societal norms through criminal activities and social unrest.

The consensus is that unemployment is detrimental to the economy of the country but there's little agreement on who should be included in the pool of the unemployed. The question prevails whether to include those that are actively seeking a job but not finding one, those that are in between jobs and/or those that have been discouraged to seek employment (Mohr & Associates, 2015). Statistics South Africa (2019), provides an official definition of unemployment as persons between the ages of 15 and 64; who were not employed during the reference week; are available to work and are actively looking for a job or to start a business within the last four weeks. While the expanded definition includes those persons that are discouraged to seek employment or have other reasons for not seeking employment. Note that these considerations may also include those persons who are moving from one job to another.

Female unemployment is a concern in South Africa, mostly because unemployment rates among females are higher than those among males (Statistics South Africa, 2014). Prominent conclusion on this challenge includes; great variation in female participation and lack of inclusion of unpaid family-orientated labour (Mahlwele, 2009). With the high rates of unemployed females and continued efforts by the South African government to increase the participation of females in the workforce, there are still some traditional stereotypes and attitudes that create barriers to workforce participation by females. These include factors such as labour market segregation, educational attainment and the predominance of temporary contracts among females. Another factor for females leaving and re-entering the labour market is their family responsibility. Some married women do not enter the labour market due to the high income that their husbands earn. These interruptions that women are faced with can lead to skills obsolescence and reduced employability.

Women are overworked, and this has an impact on the entire household (this includes children). Women manage work, the household and the community within which they reside. There is a vast benefit that comes with this responsibility but most of the efforts are not recognised and/or paid for and this in turn leads to diminishing quality of life and decision making and will put their health at risk (FAO, 2016).

The aim of the study reported here was to contribute to empirical literature by analysing female heads' barriers to employment. The aim was to collect data on the perceived barriers to employment by female heads in a low-income area. There is, therefore, a need to investigate why some unemployed female heads are discouraged to seek further employment based on what they perceive to be barriers to finding employment. By identifying these perceived barriers, recommendations and policies might be implemented to resolve them.

The rest of the article is organised as follows; section 2 reviews the literature on female unemployment and the barriers to labour force participation. Section 3 explains the methodology. Section 4 presents the results and discusses the findings and section 5 concludes the paper.

2. LITERATURE REVIEW

One of the major factors for an increased rate of unemployment in recent years has been the aftereffects of the global financial crisis that gripped the world between 2007 and 2010. The challenge of unemployment can be traced back to pre-democratic South Africa, wherein certain employment opportunities were

reserved for a few. The democratic transition in 1994 promised employment opportunities and unrestricted access to the economy for the majority (Insight, 2014). While massive strides have been made in many parts of the economy, statistics on employment paints a dire situation. The South African challenge of female unemployment mirrors the global picture.

Before the stages of industrialisation, households were the unit of production and all family members were involved in this production. It continued so even in the early stages of industrialisation where some females worked in their households and in agricultural industries and others found work in the new factories, the mills and manufacturing industries. According to the 1851 Census, this pattern changed. Only 10 per cent of married females were in paid employment because of factors such as the growth of industrial work, which was exclusively for males along with the Victorian ideology that a female belonged in the kitchen (Lawes, 1993). Between 2002 and 2007, unemployment gender gaps were constant at around 0.5 per cent with a higher global female unemployment rate at 5.8 per cent as compared to the 5.3 per cent of unemployed males (ILO, 2012). Regional trends show that in Africa, Asia and Latin America, females had a higher unemployment rate than males whereas in advanced economies, the gender gap was negative, which translated into higher unemployment rates for males than for females (ILO, 2012).

In 2008, the global unemployment rate for females was 6.3 per cent, as compared to the 5.9 per cent rate for males (ILO, 2012). The unemployment rate increased from previous years for both males and females which lead to a slight reduction in the gaps between the males and females. Despite efforts made to alleviate the problem, far fewer females participate in the labour market as compared to males (ILO, 2012). Older workers tend to have longer job searches than younger workers because they have a wide range in wage offers than the young ones (McConnell, et al., 2009).

Basic education and training are one of the most important factors that influence a woman's ability to participate in the economy. Educating females would give them an opportunity to gain some knowledge, skills and self-confidence that they seek in order to participate and develop in the labour market. A recommendation has been made that policy makers develop plans that can encourage young females to participate in educational programs and training (OECD, 2012). Education and training among females are fundamental tools to empowering them and to achieve gender equality and employment opportunities (Statistics South Africa, 2010). There are three constraints that may limit female participation in

education and training. The first one is related to the negative attitudes of some household heads for educating girls rather than to prepare them for future marriages. These households perceive chores around the house as better alternatives to education. Secondly, safety concerns and transport issues are critical in placing children at a school. The final constraint is linked to the negative attitudes that educators and administrators have on females and the value of education in their lives (Eskola & Gasperini, 2010).

3. METHODOLOGY

3.1. Survey Design

This study made use of a structured questionnaire adopted from (Slabbert, 2004) and (Charlesworth, 2010). Each questionnaire was administered to each participant with a cover page explaining the confidentiality of the participant's personal information. A pre-test phase was conducted on 30 female students and employees of the North West University (Vaal Triangle Campus) to test the accuracy, statistical significance and precision on the study before it was distributed to the actual participants in Bophelong Township. Only female students and employees were selected for pre-test to determine the sensitivity of the words used in the survey. A pilot test was also conducted on the target population to deal with any difficulties encountered on the questionnaire. The element of this study is defined as female heads of each household in the study area. The sampling unit is the residents of Bophelong Township, located 60km south of Johannesburg in Gauteng province, South Africa.

3.2. Sampling and data collection

This study consists of the non-probability sampling. The participants were female household heads conveniently approached for participation in the study. A sample of 300 females participated in the study. There are sufficient homogenous characteristics within the target population, which makes it convenient for the researcher and less costly. Field workers were employed to complete questionnaires by reading the questions aloud and writing down the answers given by interviewees. In cases where participants could not understand English, the questions were translated in the local languages.

3.3. Statistical Analysis

The descriptive analysis for this study was performed by using methods adapted from Pallant (2010) using frequency tables to explore and describe the data and to check the reliability of the scale. Thus, the first stage of analysis involved the use

of descriptive statistics to describe the perceptions of barriers to entry into the labour market by females in Bophelong.

4. RESULTS AND DISCUSSION

4.1. Demographic information of participants

4.1.1. Population composition of Bophelong township

The population of Bophelong Township has grown to about 46 089 people and about 14 267 households relative to 37 779 from the Census 2011 survey data. Within the total population of Bophelong, 50.53 per cent are females and 49.47 per cent are males. The Blacks take up about 99.12 per cent of the population and the rest of the 0.88 per cent is taken by Indians, Coloureds and Whites. Within the dominating Black group, 69.39 per cent speak South Sotho (Stats SA, 2012).

4.1.2. Employment status of Emfuleni Local Municipality

The table below reports the employment status of the ELM within the Vaal triangle area in the south of Gauteng. The comparison was made between the two Census years of 2001 and 2011.

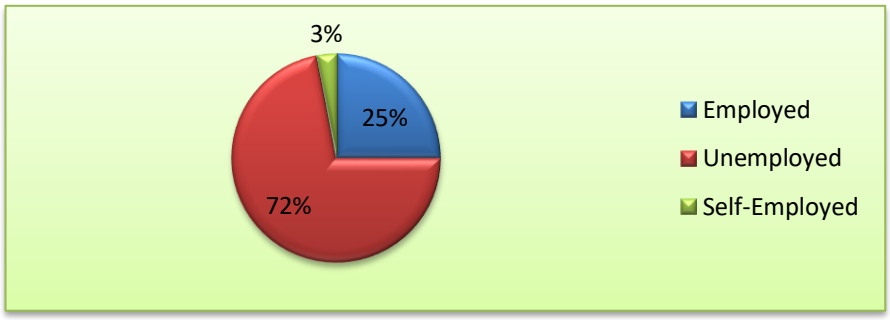
Table 4.1: ELM Unemployment Status between 2001 and 2011

EMPLOYMENT STATUS	**YEARS**	
	2001	**2011**
EMPLOYED	93537	202543
UNEMPLOYED	63160	107555
UNEMPLOYMENT RATE	**29.5%**	**34%**

Source: CENSUS 2011

Reports show an increase in the level of unemployment in townships within the Emfuleni Local Municipality (ELM) from about 29.57 per cent to 34 per cent in 2011 (ELM, 2012/3). Within this alarming percentage of the unemployed, the figure below reports that 72 per cent of the female heads in this population were unemployed, 25 per cent were employed and only 3 per cent were self-employed (see figure 4.1 below). This figure shows the employment status of the female heads in Bophelong.

Figure 4.1: Household Employment Status



Source: Survey Data, 2013

The survey data of Bophelong also shows that the sample population has more participants falling under the age group 35-44 years. The results show that the population of Bophelong Township decreases as they grow older and most do not reach the age of 65 and over. The youngest participant interviewed was 16 years old and the oldest participant was 65 years old and was not seeking employment due to ill health. 50.3 per cent of single females in Bophelong are taking care of children, followed by 21.3 per cent of females who are single with no children. 19.7 per cent of females are partnered and have children within the household. Those living in a shared household have the lowest percentage of unemployment.

The results of the survey show that the highest education level that most females in the sample population have is Standard 8/Grade 10 at 40.3 per cent, followed by the 37 per cent of those who have achieved Standard 10/Grade 12. The females in Bophelong who have achieved higher education degrees are about 0.3 per cent and only 1.3 per cent of the females have certificates or diplomas. Further to these results, 73 per cent of the females in Bophelong require further education, relative to the minority that does not require further education at about 27 per cent.

4.2. Perceived barriers to entry into the labor market for female heads

This section describes possible reasons perceived by unemployed female heads of Bophelong to be barriers to enter into the labour market. Table 2 below shows the perceived barriers with the highest level of agreement by percentage of response and relative to the rest. Lack of qualifications, education and experience seem to stand out from the rest of the barriers. Each of the highest agreed barrier is discussed below.

Table 2 shows results that 15.7 per cent of unemployed females in Bophelong perceive a lower level of education and lack of qualifications to be the highest barriers to finding employment. These females consider that had they studied any further to gain better qualifications, they would stand a better chance of getting paid work. This is in line with findings that the production of qualified graduates and postgraduates plays an important role in alleviating the unemployment problem in South Africa (Fisher & Scott, 2011). Results also show that 13.6 per cent of unemployed females in Bophelong perceive lack of experience to be another barrier to find employment. Employers are sceptical about hiring new entrants who lack not only the expertise to do the job but the life skills to sustain themselves under pressure. They would rather settle for the adults that have the experience both on life skills and work skills (World Youth Report, 2012). Results from Table 4.2 show that 11.7 per cent and 11.5 per cent of the unemployed females in Bophelong perceive lack of knowledge of spoken language and illiteracy respectively, are the barriers that prevent females to find employment. According to the International Adult Literacy and Skill Survey (IALSS), people who are employed generally have higher literacy scores than the unemployed people. People with higher literacy scores are more likely to get employment and those with lower literacy scores found themselves struggling to find employment (IALSS, 2012).

Results also show that 10.6 per cent of unemployed females in Bophelong perceive lack of Curriculum Vitae (CV) writing skill as one of the barriers to find employment and 10.7 per cent of unemployed females perceive lack of knowledge on how to handle interviews as another barrier to finding paid work. About 10.3 per cent of the females perceive lack of access to computers to be another barrier. Only 2.1 per cent of unemployed females in Bophelong perceive their gender as a barrier. Less than 1 per cent of unemployed female heads of Bophelong perceive having a disability, being pregnant or having children, having alternate sexual preferences and being required to work abnormal hours as barriers preventing them from finding employment. Hence, overall findings from descriptive statistics suggests that major barriers to entry into the labour market among the unemployed female heads in Bophelong Township seem to be the lack of qualification, lack of experience, language skills, interview skills and CV writing skills.

Table 4.2: Perceived barriers to entry into the labour market

PERCEIVED BARRIERS	**Responses**	
	N	**Per cent**
MY QUALIFICATIONS ARE NOT GOOD ENOUGH	98	15.7%
I NEED BETTER CV WRITING SKILLS	66	10.6%
I DO NOT INTERVIEW WELL	67	10.7%
I DO NOT HAVE ENOUGH EXPERIENCE	85	13.6%
I AM TOO OLD OR TOO YOUNG	11	1.8%
I DO NOT HAVE THE RIGHT REFERENCES	22	3.5%
I DO NOT HAVE THE RIGHT CONNECTIONS	36	5.8%
MY SPOKEN LANGUAGE SKILLS ARE NOT GOOD	73	11.7%
I DO NOT HAVE A COMPUTER	64	10.3%
READING AND WRITING SKILLS NOT GOOD	72	11.5%
I HAVE A DISABILITY	3	0.5%
I HAVE CHILDREN OR AM PREGNANT	5	0.8%
MY SEXUAL PREFERENCE	1	0.2%
I CANNOT WORK THE HOURS REQUIRED	4	0.6%
MY GENDER	13	2.1%
I AM OVER-QUALIFIED	1	0.2%

Source: Survey Data, 2013

The section has outlined the main perceived barriers to entry into the labour market among the unemployed female heads of Bophelong Township. A further investigation was done on these barriers to confirm any causal effect between the independent variable (employment status) and the dependent variables (qualifications, CV skills, interview skills, experience, language skills, computer skills, literacy levels). The results are shown on Table 4.3 below.

Table 4.3: Regression analysis results on perceived unemployment determinants

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
No_Qual	-.754	.348	4.697	1	.030	.470	.238	.930
CV_Skill	.734	.325	5.110	1	.024	2.083	1.102	3.935
Interv_Skill	-.243	.352	.478	1	.489	.784	.394	1.562
No_Exp	.187	.329	.321	1	.571	1.205	.632	2.299
Lang_Skill	.173	.360	.232	1	.630	1.189	.587	2.409
Comp_Skill	.158	.365	.188	1	.665	1.171	.573	2.394
Literacy_Skill	-.214	.371	.333	1	.564	.807	.390	1.670
Constant	1.052	.685	2.359	1	.125	2.864		

Source: Survey Data, 2013

The results above show that qualifications have a negative relationship with the employment status from its coefficient of (B = -.754). This implies that the more qualifications a female has, the better the chances of being employed and thereby reducing the rate of unemployment and it is also significant at 0.05 levels. Results above also show that having CV skills has a positive relationship to employment status and is significant at 0.05 levels. A conclusion can therefore be made that the perceived barriers could very well be the actual barriers of employment as most of them are related to literacy levels.

Qualifications, experience, CV skills, interview skills and knowledge of professional language have a strong relationship with literacy levels. Table 4.4 below shows the results of the correlation run between these variables.

Table 4.4: Correlation between literacy levels and other barriers

Correlations		**No_Qual**	**CV_Skill**	**Interv_Skill**	**Langua_Skill**
Literacy_Level	Pearson Correlation	.782**	.940**	.950**	.990**
	Sig. (2-tailed)	0	0	0	0
	N	228	228	228	228

Source: Survey Data, 2013

The results above show a positive correlation between the participants' literacy levels and other perceived barriers. An increase in the literacy level is closely related to an increase in qualifications, language skills, interview skills and CV writing skills. There is a correlation between the variables at a 0.01 level of significance. A conclusion can therefore be made that unemployed females in Bophelong should improve their literacy skills in order to overcome the perceived barriers to entry into the labour market. Conclusions were also made that their perceptions of barriers could very well be valid but mostly dependent on their level of literacy.

5. CONCLUSIONS AND RECOMMENDATIONS

This study moves towards the core description of unemployment within females by providing the historical background and trends of unemployment in females. Females were household keepers for centuries up to the time when industrialisation began. More females entered the labour market and flourished in the work they do. Married females were bound to stay home to care for children and their elders and did not have the opportunity to seek employment to improve their standard of living by increased income. An explanation to the gender gap in unemployment could be factors such as the segregation of the labour market, educational attainment and the predominance of temporary contractors among females. Factors that stood out in this study were the age, marital status, educational level and location of females as the causes of their unemployment. These factors can lead an unemployed female to skills obsolescence and reduce her employability.

Tradition in the past had forced married females to stay home and care for their households and bare children while males are moving between jobs. This situation would occur mainly in the rural areas. At the event of the husband's death, the wives would lose their main source of income and be forced to work. In some households, both females and males are employed but the females are earning less than their spouses.

Education and training are some of the most fundamental factors that influence a woman's ability to participate in the economy. Plans need to be made to encourage females to participate in programs that improve literacy levels and offer further training. The South African government has invested a large amount of money into educating girls and women and made education for children compulsory. There has been a significant improvement in the literacy levels of women and girls since the post-apartheid government system. A conclusion was also made that once a female has lower literacy levels, it will have an impact on other above-mentioned barriers. A correlation run shows that there is a very strong correlation between literacy levels and other barriers such as qualifications and experience.

Unemployed female heads in Bophelong also gave suggestions on the services that they would like to be exposed to in order to assist them to find employment. The results show that 28.1 per cent of female heads in Bophelong would like to attend CV writing workshops and 20.5 per cent of them prefer the job application assistance in general. A conclusion can then be made that female heads in Bophelong would prefer to be taught skills that would help them seek employment in a proper manner. The community projects that already exist in Bophelong are helpful in keeping the female heads busy with voluntary employment but they should rather concentrate on helping them know how to search for suitable jobs, how to write an appropriate CV, how to conduct themselves in an interview and finally how to prepare themselves for the actual work environment.

Education is the priority objective of the South African government. Improved strategies should be implemented to encourage young girls to pursue further education and training, therefore greater interest to progress will be evident. The government has already placed compulsory education for primary pupils, but less attention is given to the high school girls whose lives are challenged by social factors such as crime, teenage pregnancies and alcohol and drug abuse. In general, policy makers need to put more focus on females who are living in townships and encourage them to participate in the labour force.

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THE AFRICAN SCARE OF FALL ARMYWORM: ARE SOUTH AFRICAN FARMERS IMMUNE?

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–Abstract–

The manifestations of Fall Armyworm [FAW] (Spodoptera frugiperda) in South Africa were all clearly reminders of the seriousness of this epidemic in 2019. The scare caused by FAW as an African Moth continues to multiple largely. This is becoming a factor for African farmers, seeking urgent acknowledgement of the associated detrimental effects mapped with economic, social, environmental opportunities and fully exploitation of sustainable agriculture in the country and elsewhere. This study adopted qualitative research approach, with an aid of non-empirical research design: Systematic review, closely looking at recent reputable reports across globe, while using South Africa as a case study, from 1995-2019 (i.e. 24 years' projection). This study found that South African readiness against FAW is [currently] highly questionable, with the consequences of failing to act clearly felt by many South African farmers, therefore, the strategies geared towards this pandemic [might] not be able to totally stop the clock on its effects on farming practices, however, revisiting and adding to the available strategies can be beneficial to this sector to holistically affirm and sustain agriculture in South Africa as one of the two sectors at the core of economic development.

It is concluded that there is no single solution to respond to this elusive spread, thus, multi-agency approach is highly sought. For recommendations, available precautions should not be limited to the positive use of furrows, chemicals, clear warning to cattle farmers and swift reporting of outbreaks. The interventions of South African government [i.e. Department of Agriculture, Forestry and Forestry - DAFF] and other interested parties remains important in response. One of the essential components relates to investing more energies of understanding the ignored effects of FAW on South African farmers.

Key Words: Agriculture, [African] Fall Armyworm, African scare, Economic development, Farmers, South Africa, Sustainable development

JEL Classification: Q011

1. INTRODUCTION AND PROBLEM FORMULATION

The Guardian News (2018:1) provides that the destruction of Armyworms is stripping key food Crops in the Southern Africa region, with high possibilities of spreading to other parts of Africa, prompting 'Experts' on this field to issue a stern warning during the held 'Emergency Meeting' consisting of 16 African countries. It was during this meeting that the fields of Maize in these African countries; *South Africa*, Zimbabwe, Malawi and Zambia were cited to be invaded, it was also said that these countries are rated as 'Staple Crop/Corn/Maize' largest producers [i.e. South Africa and Zimbabwe] throughout the African region, deeming this plague a new threat in the Southern Africa regions. Phillips (2017:1) points out that this pest [FAW] is a 'Native to the Americas; spreading rapidly across parts of Africa in the mid-2016 posing a serious threat to food security in the African affected areas. Historically, this epidemic [i.e. a serious pest for Maize] is believed to be [mostly] associated with the Americas', dating back from the 1957, originating from the tropical regions of the United States (US), Argentina, Caribbean regions and Brazil. This species also occurs in Yemen, some Pacific Islands, and parts of Australia, Rose, Dewhurst and Page (2000:1). The first reports of this outbreaks (i.e. attributed to indigenous *Spodoptera spp* / FAW) in Africa came from several West and Central African countries early in 2016. Fast forward December 2016, the first unconfirmed reports of Armyworm damage to Maize were received from Zambia and Zimbabwe. It is also highlighted that this pest is devastating to Crops, with current impossibilities to eradicate within Southern African. The responsible stakeholders have not managed to control it effectively as it keeps evolving, for remedy, a formulation of a suitable plan for managing it is highly sought as food insecurity would worsen without a lasting workable solution (Guardian News, 2018:1).

A recent study conducted by Harman (2019:1) by the Exeter University, Centre for Agriculture and Bioscience International in the United Kingdom (UK) supported the presented notions *Supra* by indicating that in January 2016, major outbreaks of FAW first occurred in Nigeria and Ghana respectively. With other identifications reported in Benin, *São Tomé* and *Príncipe* and Togo. By September 2017, the FAW was reportedly to be present in 28 sub-Saharan African countries, South Africa included. Dean (2017:1) also submits that Maize farmers in Kenya expressed concern over the FAW threats, estimating more than 400 000

affected hectors in East Africa. (Harman, 2019:1) further avers that estimations indicated up to 50% Maize yield loss in Africa could be attributed to FAW infestations. It is believed that this pest arrived in Africa on a passenger flight from America. It is also speculated that African countries with major air transportation hubs and a warm and moist climate similar to those of the pest's natural habitat recorded the first invasions of FAW (Harman, 2019:1).

Subsequently, in January 2017, the South African DAFF received reports of an [unknown] Armyworm damaging Maize plants on farms of Limpopo and North West Provinces. This was confirmed by a 'Taxonomist' at the Animal Research Council Plant Protection Research (ARC-PPRI), Biosystematics Division, by positively identifying a male Moth specimens collected as the FAW *(i.e. Lepidoptera: Noctuidae)*. It was then established that the FAW flies on prevailing winds, has a short life-cycle and attacks a wide range of Crops, Harman (2019:1). This was rendered as a serious economic risk to the local South African farmers classified as an A1 quarantine pest on the list of the European and Mediterranean Plant Protection Organisation (EPPO) and a quarantine pest in South Africa. It was also said that this pest is 'Polyphagous' in nature showing infection preferences for 'Grain Crops,' Maize and Sweetcorn (i.e. young plants and cobs) in South Africa, with some reports of damage on Sorghum noted. Other South African reports shows damage on Spinach, Sugarcane, Rice, Lucerne, Sunflower, Wheat, Cabbages, Pepper, Soya, Potatoes, Pastures and Grasses. Harman (2019:1) also warns that the mentioned Crops are at serious risks in these countries; South-Southeast Asia and Australia from FAW related infestations if efficient measures are not taken worldwide.

Worryingly, despite the ARC-PPRI attempts to describe this pest, the 'South African Agriculture Ministry' mentions that little was known about the arrival of Armyworms and their long-term effects, only deeming it as a migratory pest similarly to the African Armyworm, which may migrate in large numbers from one area to another, causing great damage, affecting Crops such as; Sorghum, Soybeans, Groundnuts and Potatoes. Adding to this problem; was the struggle of the South African regions with the worst drought season in more than three decades in 2012 and 2015 respectively, British Broadcasting Corporation [BBC] (2017:3). Therefore, the objectives of this study was to explore the associated effects of the African scare of FAW, while establishing the readiness and immunity of South African farmers for economic and sustainable development.

2. METHODS AND MATERIALS

This study adopted a *non-empirical research design: Systematic* review, this form of research design identifies, describes available research literature 'using systematic and explicit accountable methods and pre-specified formalised tools for searching and integrating literature (Gough, Oliver & Thomas, 2012:5 and Punch, 2014:108), aided by qualitative research approach. For *data collection*; documentary sources where used, where the researchers collected qualitative documents, Creswell (2014:190) states that researcher may collect qualitative documents, for example; public documents, such as newspapers, minutes of meetings or official documents. Furthermore, one can ask questions of documents in the same ways as one might ask questions of research respondents (Matthews & Ross, 2010:282). DAFF media releases, South African online newspapers and media reports, journal articles, internet searches (i.e. Electronic databases – Google Scholar, EbcoHost, Emerald Insight, Jstor, ProQuest, Sabinet, Sage Online and Science Direct) and Famers Weekly publications among others (Creswell, 2014:190). The *sampling methods* involves the 'non-probability: Purposive sampling' focusing on data primarily relevant to the study subject. The keywords/phrases were used to filter info relevant to reach data saturation of the research problem, while applying Qualitative Content Analysis (QCA) to identify the themes to respond and verify the study objective. This was applied to present honesty reporting relating to the consulted literature, Liamputtong (2013:246). The reviewed data was restricted to 1995-2019 (i.e. 24 years' projection) to demarcate inclusion/exclusion criterion. For *data analysis*; Textual Analysis (TA) was adopted, solely depending on a very detailed analysis of the collected data.

3. LITERATURE REVIEW AND DISCUSSIONS

The African Armyworm (*Spodoptera exempta*) also known as "the *Okalombo*, *Kommandowurm*, or Nutgrass Armyworm, also branded as the African Moth is a very deleterious pest, capable of destroying entire Crops in a matter of weeks. It feed on all types of Grasses, including early stages of Cereal Crops (i.e. Corn, Rice, Wheat, Millet, Sorghum), Sugar cane, and [occasionally] on Coconut" (Odiyo, 1984:1) and Yarrow, Otindo, Gatehouse and Lubega (1981:1). The African Armyworm march in large numbers from Grasslands into Crops, often found in larger numbers during rainy season and post prolonged periods of drought, Haggis (1984:1) and Haggis (1986:1). Notably, during the long dry season in Eastern Africa of South Africa, their population densities are reported to be very low, with outbreaks rarely observed, Odiyo (1981:1).

For specifications; this Moths live-up to 10 days. With the female expected to lay a maximum of about 1000 eggs lifelong, laid in clusters on leaves, hatching in 2-5 days. The Six larval (i.e. Caterpillar) instars are completed in 2-3 weeks occurring in two morphologically distinct forms, namely: "(1) A *'gregarious' form* - black with yellow stripes, and (2) a *solitary form* - green or brown. They become 'gregarious' at higher densities; causing serious outbreaks. It should also be highlighted that this pest do not exhibit true gregarious behaviour of locusts, it is often unnoticed by farmers until Caterpillars are 10 days old and change from green to black in colour," Brown (1972:2). The *Larvae* is reported to burrow 2-3 centimeter into the ground to pupate. While, the adults emerge in 7-to-10 days (Dewhurst, 1985:3). This Moths [probably] migrate over tens and over hundreds kilometers between respective emergence and ovipositional sites (Riley, Reynolds & Farmery, 1983:2) causing the reported outbreaks as initially reported in this study, they further occur suddenly in areas that are free from infections for several months, Jahn (1995:1).

4. THE INDICATIONS OF NATIVE AND ALIEN SPECIES IN AFRICA REGION: THE ARMYWORMS

As indicated in the introduction and problem formulation section, in 2017, Zimbabwe was reported as the worst affected African country. This confirmation was supported by Monks (2017:1) by revealing that the United Nation Food and Agriculture Organisation (UN FAO) reports that this pest was then present in Seven of the country's eight provinces, with estimations of approximately 70% Crop destructions in some of these areas. This outbreak includes both the [unkown] 'Native African Armyworm' and the 'FAW' [i.e. a non-indigenous / alien and destructive species that originated in the Americas]. Adding to the introductory comments of this study, the affected chief suspects Southern African countries included South Africa, Zimbabwe, Malawi, Zambia, Namibia and Mozambique. As the introductory section of this study confirms, the presence of FAW in Africa was first reported on the Island nation of *Sao Tome* and *Príncipe* in January 2016. Other parts of West Africa, including Nigeria and Ghana were reported to be affected as well. This rendered the responsible governments of Zimbabwe and South Africa to publicly confirm the existing problem of this pest. However, the experienced damage in Africa is yet to be confirmed, with many affected countries failing to provide accurate data relating to the damage caused, BBC News (2017:2). In sequence, Zimbabwe and South Africa are pointed to be highly affected by this [new] pest. Wilson (2017:1) provides that a combination of 'native African Armyworms' and 'FAW' from the-indicated Americas are ravaging 'Staple Crops' across the Southern Africa. If uncontrolled, major food

shortages are expected. To indicate the extent of this epidemic; Coleman (2014) reports that 'Marthinus Beytell' farms, 20 kilometres from Potchefstroom (i.e. South Africa) lost about 50% of 70 hectors camp of natural [bulk] grazing [virtually] overnight. The local neighbours in the area also reported serious infestations, with additional reports of this infestations coming from Windsorton and *Letsitele*. Moreover, the effects of this outbreak continues, attacking mature and young Maize. Some parts of Mpumalanga Province were cleared of FAW by the time of conducting this study. In response; the producers in the 'Summer Rainfall Production' areas should remain vigilant and continue checking their Maize lands for possible infestations. Farmers are highly advised to report any outbreaks to the local DAFF, Coleman (2017:1).

Phillips (2019:1) agrees that recent (i.e. 2012 and 2015) drought conditions had a significant negative impact on South Africa's 2018/2019 summer Crop production, while considering lack of rain resulted in reduced damage from FAW infestations. The affected areas by FAW during the 'Summer Season' were some parts of Limpopo, Gauteng, KwaZulu-Natal and Mpumalanga Provinces. In contrast to previous (i.e. 2017/2018) "Summer Crop Production season, post the identification of FAW in the country in the [early] 2017, 'Summer Crop Production' in the North West and the Free State Provinces, along with other higher-lying areas, were reported to be largely affected by FAW during the 2018/2019 season. However, it the experienced damage cannot be exactly ascertained, with the drought conditions cited to have a big limiting impact on FAW in 2018/2019 season. Equally, Van der Walt (2019:1) highlights that the local DAFF called the Western Cape Province farmers to conduct regular checks on their lands after detecting "high numbers" of FAW Moths in the area, placing more concerns to the local farmers. Evidence-based, the FAW *Larvae* was positively identified on Sweetcorn on a farm near Clanwillian [Free State Province] and the presence of high numbers of FAW Moths were also confirmed, Phillips (2019:1). It is stated that it was not the first time that FAW occurred in this province as it was sporadically observed in the year 2018. Further investigations reveal that the FAW migrates during Autumn season, spreading to provinces, with weather conditions of high wind, this plays a pivotal role in the FAW spreads, Phillips (2019:1). Thus, the local farmers are seriously cautioned to be alert of what was happening on their farms and around them, they should check [any] 'Pheromone traps' regularly and immediately report [any] detection of FAW to relevant authorities timely, Phillips (2019:1).

For interventions, Dean (2019:1) reveals that Grain South African urged the local farmers to continue scouting for Crop pests [Caterpillars] on their lands. This

caused delayed plantings of Maize in the 2018/2019 season, especially in the Western and central Maize belt in South Africa, negatively providing major concerns for growers. For consideration, the expected impacts on certain herbivorous insect pests should form part of the plan. The presence of Caterpillars in Crops were reported by Grain South Africa in various 'Summer [Grain]' areas, including; Hennenman, Bothaville, Kroonstad and Viljoenskroon, as well as Piet Retief and in game camps near Badplaas [i.e. all in South Africa], Dean (2019:1). The resemblance of the identified Caterpillar(s) is positively linked to the 'African Armyworm' rather than the 'FAW,' or the very similar 'False Armyworm.' The local farmers are urged by the Grain South Africa in 2019 to send their respective photos of [any] Caterpillar infestations they can notice to 'Crop Watch Africa' to aid in compiling a detailed map of possible tracking distributions and prevalence of this insects. The local producers are also urged by the Grain South Africa in 2019 to keep scouting for any type of Caterpillar damage, with early detection and identification for effective control measures, Dean (2019:1).

Phillips (2017:1) points out that this pest called for reviewing of current status of FAW infestations in the Southern Africa region; this should be done by agreeing to a harmonised systems of monitoring and assessing the associated reported impacts; reviewing and adopting of current standard protocols for specific assessments; sharing country-specific experiences of related infestations and management efforts, developing frameworks for monitoring and management of FAW at regional and country levels and identifying opportunities for collaboration to sustainably manage it. The Farmer's Weekly (2017:1) reveals that the local farmers affected by FAW should often spray insecticides upon noticing this pest, immediate intervention is highly sought, it is also warned that if 5% to 10% of plants show infestations (i.e. five to 10 plants per 100 plants should inspected for possibly infections). Only products containing active ingredients already approved for FAW by the 'Registrar of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (No. 36 of 1947)' should be used. The CropLife South Africa protocols added that insecticides must be applied during the early development stages of *Larvae*. Adult *Larvae* may prove to be very difficult, rendering impossibilities of effective lasting control measures, Farmer's Weekly (2017:1). The best time for application referred to instances when a *Larvae* feed on exposed leaf surfaces, where insecticides can reach them outside Cobs, Ears and Tassels Farmer's Weekly (2017:1). As soon as *Larvae* penetrate too deeply into the Whorl or feed inside the Cob, it becomes virtually impossible to effectively control the FAW. In addition, smaller *Larvae* are easier

to control than fully-grown *Larvae* and insecticides should be applied strictly according to the recommendations on the label in use.

The available control measures vary from 'very poor to adequate' with the use of Carbamates and Organophosphates often recommended. It is highly advisable to test [any] these products on a small patch for efficacy before using it on a large scale. It should be also registered that Certain strains of *Bacillus thuringiensis* may not be effective against FAW, Farmer's Weekly (2017:2). Therefore, it is vital to test products before using them extensively. It is highly advised that South Africa local producers calibrate Sprayers and Nozzles, while ensuring that they are in good working condition to deliver correct droplet size and spray volumes. The [Nozzles] need to be aimed at plant rows [i.e. and not between rows] to reach the target with the maximum spray volume. Optimal spray volumes are also recommended; on average, between 200 and 400 litres/hectors for Maize Crops should be adequate to deposit active ingredients on a target, water potential of Hydrogen (pH) and adjuvants have to be adjusted in line with the recommendations on the label (Farmer's Weekly, 2017:2).

5. CONFIRMED REPORTS OF FALL ARMYWORM IN SOUTH AFRICA: NOT IMMUME TO THIS PLAGUE

The AgriOrbit (2017:2) states that the reported damage in South Africa was mainly identified on sweetcorn and White Maize planted for seed production. "The confirmed reports came from all the districts of Limpopo Province and between Swartruggens and Mahikeng, as well as Lichtenburg in the North-West Province." However, the local DAFF is levelled with criticism based on a lack sufficient actions towards FAW in the affected areas. The local DAFF hinted that a meeting with various role-players from industries and research organisations on 25 January 2017 determines plans of action, with emphasis placed on supplying the local producers with correct advices of managing FAW; the first rendered step of this 'contingency plan' was on confirmation of identified FAW by the local farmers. AgriOrbit (2017:2) further highlights that measures are put in place by these stakeholders [DAFF included] to protect Crops and validate South African's capacity to assist other affected African countries with their Crops shortages. In terms of reporting channels, the DAFF called on the local producers to show vigilance of this pest in their Maize fields and the importance of immediately reporting any sightings was stressed. The local farmers are also urged to contact a chemical representative to advise with available control options. With regard to pest management advice, Grain South Africa distributes 'Preliminary Interim Guide' for the use of agricultural chemicals to control infestations suspected to be

linked to FAW. This guide warns the local producers to use chemicals registered for use in Maize for FAW infections - *"It is best to try those products that are registered in Maize for other Lepidoptera pests, all chemicals application must be carried out in consultation with chemical representatives. They are also reminded that pesticides will only successfully control the Larvae before they seek the cover of ears … it is also futile to try and apply pesticides once the Larvae are inside ears." Producers [farmers] can also turn to other techniques used for control of the African Armyworm, such as digging furrows,* AgriOrbit (2017:3)"

6. THE AFRICAN RESPONSIVE STRATEGIES ON ARMYWORM EPIDEMIC

Monks (2017:2) contends that neighbouring country to South Africa, such as; Zambia took [drastic] measures to respond to Armyworm. This covers over 100,000 hectares of the infested farmland as initial reported in this study. The local government to dispatched the Army [i.e. Air force] planes to spray the affected areas with pesticides, owing to the fact that the FAW are reported to be 'hard to kill species and born survivors.' The available pesticides in Africa to control this plague are currently ineffective. For best practices; in the US, genetically modified Crops are used to combat FAW, with the development of defences reported. Devastating, Brits (2017:1) adding to the introductory comments of this study, notes that several reports in the media on the existence outbreak of Armyworm in Zambia, spreading to Zimbabwe, called for the Zambia National Farmers' Union to indicates that the FAW reached at least half of the country's ten provinces by the end of 2016, further reported in seven of the eight Maize-growing provinces. This refers to 124 000 hectares of estimated damages of Zambian Maize fields.

In January 2017, Brits (2017:1) reports that Malawi became the third Southern African nation to report FAW. The initial [new] arrival of this pest was initially reported in the West and Central Africa countries [i.e. including Zambia and Zimbabwe] as initially indicated in this study. As a result, the Scientists warn that parts of Southern Africa [i.e. South Africa not immune] already hit by record droughts now face another potential food crisis resulting from the FAW threats due to the following characteristics, BBC News (2017:1): It is very hungry (and not picky), it is unknown enemy, it is [very] fast in nature, it travels far and wide, migrating long distances causing greater damage (i.e. Caterpillar), it is not just targeting any old Crop, Maize are often affected, it is hard to find and bad timing in relation to drought making less availability of food, BBC News (2017:1). For remedy; insecticides use, such as; chemicals can be effectively used to deal with

this pest during its early stages, however, post that, it can become much harder to eradicate it, as some populations of FAW develops resistance, further calling for a coordinated response. Other workable approaches involve digging trenches, employing natural predators, like birds, to eat the Worms or even burning the Crops, BBC News (2017:2). Therefore, this study presents the following identified themes in parts of African and international literature on this subject. Therefore, this pest was reported in Limpopo, Mpumalanga, North West Province and Free State Provinces (Refer to figure 1). This pest has struck us like lightning and now we have more questions than answers.

Figure 1: Distributions of Fall Armyworm in South Africa and the attacked Crops

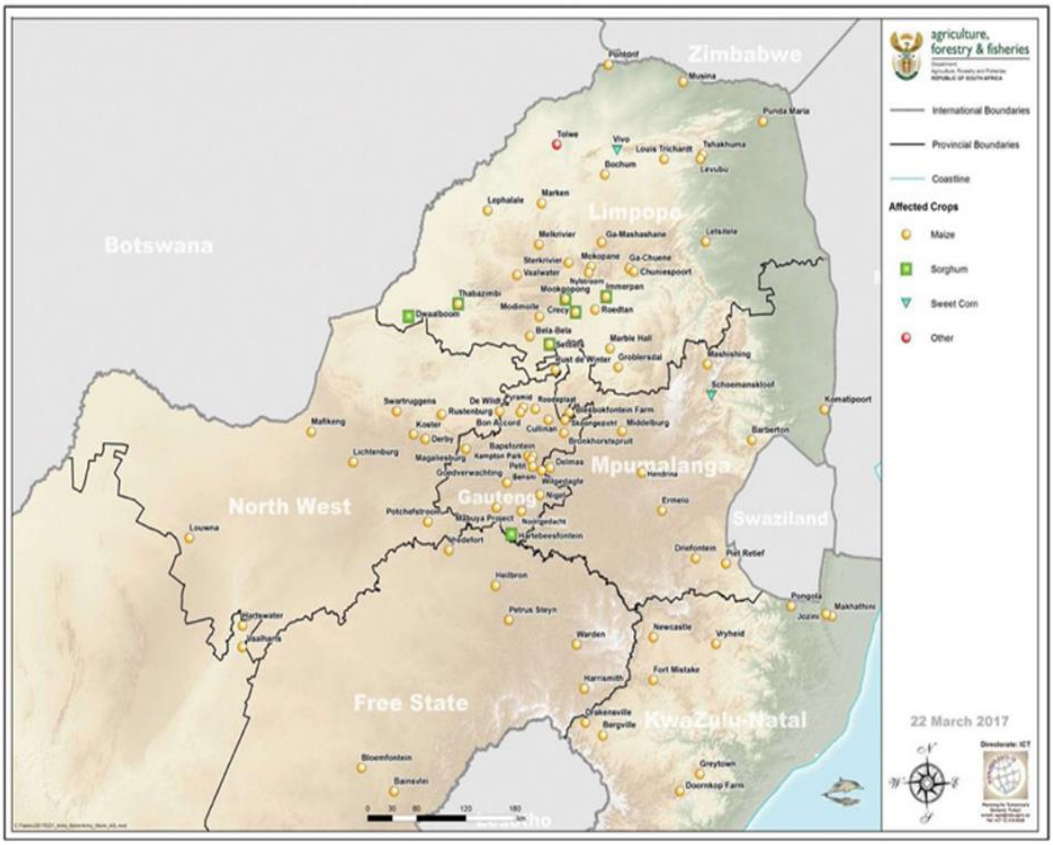

Figure 1: Distribution of fall armyworm in South Africa and the crops that were attacked.
Source: DAFF, JanHendrik Venter

Source: Erasmus (2017:1)

7. THE IDENTIFICATION OF STUDY THEMES

7.1. New south African epidemic: South African farmers' stern warning

AgriOrbit (2017:20) suggests that the FAW is regarded as a new pest to South Africa and no pesticide were previously registered to be used against it. Thus, important processes should follow to ensure that local farmers have access to right chemicals to combat this outbreak. Chemical suppliers are encouraged to apply for emergency registration of agricultural chemicals to be used on Maize and other host plants against the FAW. An interim control programme aimed to assist farmers with a guide for pesticide use as an emergency measure is communicated to various role-players and is available on DAFF website as they are products (pesticides) already approved to control *Lepidoptera* pests in Maize and other Crops that may be damaged by this pest.

7.2. The devastating nature of African and fall armyworms

The was a consensus on the cited literature as shared by Wilson (2017:1) that both the 'African' and 'FAW' do most damage to the Staple Cereal Crops such as Maize, Wheat, Sorghum, Millet and Rice. It was also revealed that they also eat 'Pasture grasses' with much devastating impacts on livestock production. The African Armyworm, can be 3-centimetre-long and can reach densities as intense as 1000 Caterpillars per square metre, quickly razing Crops to the ground. Unlike their African cousins, the FAW also feeds on a range of 'Non-cereal Crops'. Nearly 100 different host plant species have been recorded. These include the outlined Crops as discussed in the initial sections of this study. On part relating to the distribution of FAW in Africa, the ARC (2017:1) reveals that *Spodoptera.frugiperda* is native to tropical and subtropical regions of the Americas as confirmed by the introductory comments section of this study.

7.3. The best ways of stopping African and fall armyworms damaging crops and other agricultural products

As initial illustrated in the initial discussed sections of this study; chemical pesticides can be effective against [both] Armyworm species. However, the noted resistance to many chemicals is an issue for the FAW throughout its native range. It is not known whether there is pesticide resistance in the FAW blighting Southern Africa, South Africa no exception. The variable efficacy may be due to genetic resistance, or it might be as a result of the way in which the spray is applied. The FAW are often inaccessible to insecticides because of their tendency to hide in the whorls and reproductive parts of the host plant. Research is needed

to work out which chemical is the best to control the strain of FAW in southern Africa, Wilson (2017:1).

8. CONCLUSION AND RECOMMENDATIONS

The African scare of Fall Armyworm is real and the South African farmers are not immune to this plagues. In an attempt to effectively control this plague, (i.e. FAW in South Africa), the DAFF issued a Preliminary interim guide for the use of agricultural chemicals to control infestations of FAW. This guide can be downloaded on this website (i.e. http://www.daff.gov.za), the local farmers must only apply approved insecticides at the application dosage rates recommended on the product labels. Application must only be made against young instar *Larvae* which are less than 10 millimetre (mm) long. Application against older *Larvae* is not successful as they feed deep inside whorls of plants and are therefore protected from contact with the insecticide (ARC, 2017:1). AgriObit (2017:1) reports that for the control measures to be effective, the Worms must be found speedily. When they [Caterpillars] are fully grown, the use of insecticide control is often not recommended, as most of the damage to Crops will already have been done, and the emerging adults will probably move off and not produce a second generation in the same location. Another factor that plays a role in South Africa is temperature. This pest [Caterpillar] requires temperatures of between 24 and 32 Degrees Celsius to develop, and therefore anything below this will hinder development and often cause death of the *Larvae*. The notable control measures are demarcated to the following for this study (i.e. The list inexhaustible): Creation of interval furrows; The use of chemicals and Reporting of outbreaks (AgriObit, 2017:1).

Therefore, the envisaged future for this epidemic refers to the warning from the FAO is a bleak one, suggesting that things will probably get worse before they get better. The following verbatim expressions by Dr Phiri (2017) (in BBC, 2017:3) provides a summation on FAW future: *"It has just started - even those countries not currently affected should prepare themselves for possible infestations."*

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