

**JOURNAL OF GOVERNANCE AND
REGULATION**

Postal Address:

Postal Box 136
Sumy 40000
Ukraine

Tel: +380-542-610360
e-mail: info@virtusinterpress.org
www.virtusinterpress.org

Journal of Governance and Regulation is published four times a year, in September-November, December-February, March-May and June-August, by Publishing House "Virtus Interpress", Gagarina Str. 9, office 311, Sumy, 40000, Ukraine.

Information for subscribers: New orders requests should be addressed to the Editor by e-mail. See the section "Subscription details".

Back issues: Single issues are available from the Editor. Details, including prices, are available upon request.

Advertising: For details, please, contact the Editor of the journal.

Copyright: All rights reserved. No part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing of the Publisher.

Journal of Governance and Regulation

ISSN 2220-9352 (printed version)

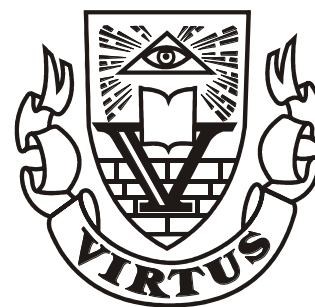
ISSN 2306-6784 (online version)

Virtus Interpress. All rights reserved.

JOURNAL OF GOVERNANCE AND REGULATION

VOLUME 4, ISSUE 4, 2015, CONTINUED - 5

CONTENTS



THE PERCEPTIONS AND NATURE OF SERVICE DELIVERY INNOVATION AMONG GOVERNMENT EMPLOYEES: AN EXPLORATORY STUDY	575
<i>Nico Martins, Ophillia Ledimo</i>	
COMPETITIVE INTELLIGENCE AWARENESS IN THE SOUTH AFRICAN PROPERTY SECTOR	581
<i>Tshilidzi Eric Nenzhelele</i>	
SMALL AND MEDIUM ENTERPRISE (SME) INTERNET MARKETING CHALLENGES IN THE TSHWANE AREA, SOUTH AFRICA	590
<i>Louise van Scheers, Johan Botha, Jacques van Scheers</i>	
THE POTENTIAL FOR REDUCING YOUTH UNEMPLOYMENT THROUGH INFORMAL BUSINESS DEVELOPMENT IN THE ETHEKWINI MUNICIPALITY, KWAZULU-NATAL PROVINCE, SOUTH AFRICA	596
<i>Pfano Mashau, Jennifer Houghton</i>	
THE EFFECTS OF SHADOW BANKING ON THE TRADITIONAL BANKING SYSTEM IN ZIMBABWE	605
<i>Virimai Mugobo, Misheck Mutize</i>	
AN INVESTIGATION OF FACTORS RELATED TO SELF-EFFICACY FOR JAVA PROGRAMMING AMONG COMPUTER SCIENCE EDUCATION STUDENTS	612
<i>Desmond Wesley Govender, Sujit Kumar Basak</i>	
A STUDY OF SMALL, MEDIUM, AND MICRO-SIZED ENTERPRISE (SMME) BUSINESS OWNER AND STAKEHOLDER PERCEPTIONS OF BARRIERS AND ENABLERS IN THE SOUTH AFRICAN RETAIL SECTOR	620
<i>Mlenga G Jere, Albertina K Jere, Jonathan Aspeling</i>	
THE IMPACT OF MATERIALISM ON THE ENTREPRENEURIAL INTENTION OF UNIVERSITY STUDENTS IN SOUTH AFRICA	631
<i>Olawale Fatoki</i>	
HARMONIZING THE SECURITIES ACTS OF THE CARIBBEAN COMMUNITY	639
<i>Annette C. Borel</i>	
A CRITICAL REFLECTION ON SUBJECTIVITY IN EXAMINATION OF HIGHER DEGREES	645
<i>Collins C Ngwakwe</i>	
TIME SERIES ANALYSIS OF INTERACTION BETWEEN AGGREGATE EXPENDITURE AND JOB CREATION IN SOUTH AFRICA	649
<i>Thomas Habanabakize, Paul-Francois Muzindutsi</i>	
DEMOGRAPHIC DIFFERENCES, OCCUPATIONAL STRESS AND ORGANISATIONAL COMMITMENT AMONG EMPLOYEES IN HIGHER EDUCATION INSTITUTION	658
<i>Zhuwao S, Setati TS</i>	

THE PERCEPTIONS AND NATURE OF SERVICE DELIVERY INNOVATION AMONG GOVERNMENT EMPLOYEES: AN EXPLORATORY STUDY

Nico Martins*, Ophillia Ledimo*

Abstract

Innovation has become prominent within the leadership literature as an underlying and important aspect of service delivery. This study set out to determine the perceptions and nature of service delivery innovation among employees of a South African government department, using a sample of 289 participants. Statistical analysis was conducted to analyse the data which indicate that innovation is an important aspect of service delivery. This study suggests that to enhance service delivery employees should be encouraged to be innovative. The implications of the findings are discussed and recommendations for future research are made.

Keywords: Service Delivery, Government, Innovation

*Department of Industrial and Organisational Psychology, University of South Africa, P.O. Box 392, Pretoria, South Africa, 0003

Tel: +27 12 429 8219

Fax: +27 12 429 8536

1 Introduction

Service delivery innovation in the modern economy is critical because of the rapidly changing preferences and the emergence of multiple customer/clients segments with different tastes, values and patterns. Hence organisations use innovation because they seek to deliver services and products in a cost-effective fashion, deliver greater value to customers/clients, and improve service delivery methods to increase profitability and decrease costs. When products or services become more homogeneous or an original competitive advantage cannot be sustained, service innovation becomes an effective way for an organisation to accelerate its growth rate and profitability (Chen, Tsou & Huang, 2009).

Research on service delivery innovation has been conducted at length in the private sector rather than in the public sector organisations (Alam 2002, Baker & Shinkula 2007; Ordanini & Parasuraman 2011). Public service organisations like private sector organisations are also compelled to engage in service delivery innovation process because they are accountable to the public or citizens of a nation. Therefore, to achieve a competitive service position, government department as service organisations must deliver services and products in new and creative ways applying their specialised competences in the form of knowledge and skills to the public (Vargo & Lusch, 2004). It is therefore, the purpose of this study to explore the perceptions and nature of service delivery innovation in a public service organisation, namely government department in South Africa.

2 Literature review

2.1 Definition of service delivery innovation

Service delivery refers to the actual delivery of a service and products to the customer or clients (Lovelock & Wright, 2002). It is therefore concerned with the where, when, and how a service product is delivered to the customer and whether this is fair or unfair in nature. The service concept defines the “how” and the “what” of service design, and helps mediate between customer needs and an organisation’s strategic intent (Goldstein, Johnston, Duffy & Rao, 2002). According to Chen, Tsou and Huang (2009), innovation in service delivery orientation refers to an organisation’s openness to new ideas and propensity to change through adopting new technologies, resources, skills and administrative systems. Service delivery innovation is also described as an overall process of developing new service offerings in the organisation (Johnston & Clark, 2001). Innovation drivers are similar in product and service contexts, at most differing in relative importance between the two environments.

In the public sector, service components are often not physical entities, but rather are a combination of processes, people skills, and materials that must be appropriately integrated to result in the ‘planned’ or ‘designed’ service. Goldstein *et al* (2002) argued that service innovation has also been defined in a number of ways from a narrow view of being concerned with the “idea generation” portion of the new service delivery process to the whole process

of service development. It is therefore critical to clearly define the service concept before and during the innovation, design and development of services. Baker and Sinkula (2007) also highlighted that a broader framework of service delivery innovation involves simultaneous examination of multiple innovation antecedents and consequences in the service concept. Hence, the service concept then serves as a driver of the many decisions made during the innovation and design of service delivery systems and service encounters.

2.2 Value of service delivery innovation in public service organisation

Service delivery innovation is critical for organisational success. Service organisations design new service offerings from either the customer's viewpoint or the organisation's delivery viewpoint (Goldstein *et al.*, 2002). Innovation is mainly reactive and proactive in nature.

Reactive service delivery innovation is aimed at addressing perceived irregularities, insufficiencies and inefficiencies identified by internal or external stakeholders of an organisation. This type of service delivery innovation, is problem oriented and would adopt a problems solving approach. According to Sijbom *et al.* (2015) service delivery innovation that is reactive is triggered by problems observed by employees and managers who will highlight problematic practices and routines that they are responsible to oversee. One reason for perceived service delivery problems is the mismatch between what the organisation intends to provide (its strategic intent) and what its customers/clients may require or expect (customer/clients' needs) (Johnston & Clark, 2001). This suggests that reactive service delivery innovation is essentially in addressing existing

problems in the organisation identified by internal and external stakeholders.

Proactive service delivery innovation is important because it is aimed at enhancing organisational practices, procedures and process before problems occurs. The initiatives focus on continuous performance improvement in the organisation. Creative use of delivery modes is increasingly becoming a new source of differentiation and innovation for organisations today (Chen *et al.*, 2009). According to Goldstein *et al.* (2002); to ensure that the service package and service encounter fit the needs of the customer and the service organisation itself, organisations must focus on proactive measures to design and delivery their service concept.

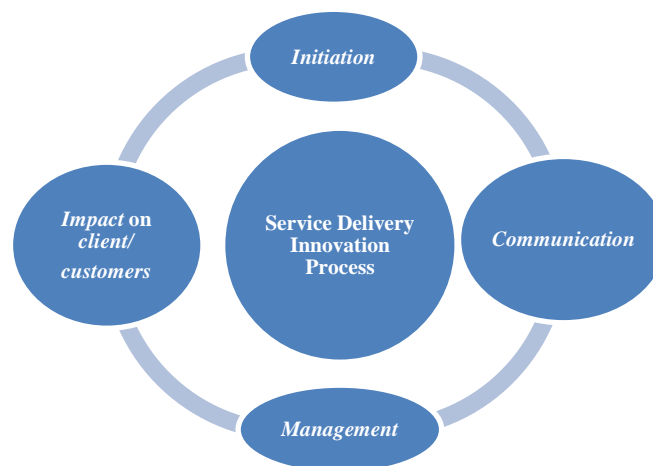
In addition to the above, service delivery innovation is valuable in organisations because it improves or enhances the following (Goldstein *et al.*, 2002; Johnston & Clark, 2001):

- *Service operation*: The way in which the service is delivered.
- *Service experience*: The customer's direct experience of the service.
- *Service outcome*: The benefits and results of the service for the customer or clients.
- *Value of the service*: The benefits the customer perceives as inherent in the service weighed against the cost of the service.

2.3 Dimensions of service delivery innovation

The process of service delivery innovation includes the initiation, communication, management and impact on clients/customers. This process is cyclical in nature.

Figure 1. Service delivering innovation process



Initiation of service delivery innovation is the first dimension and step of the process, it involves creating a culture of continuous service improvement in the organisation. An innovation orientation

organisation leads to breakthrough innovation because of its focus on creativity, and it becomes an essential factor in creating more extra (new) and convenient (renew) service delivery channels (Chen *et al.*, 2009).

This stage involves both internal and external stakeholders. According to Ordanini and Parasuram (2011) engaging outside stakeholders helps to increase innovation radicalness, which is hindered when only internal sources are involved. Feedback and inputs from employees, managers, business partners and customers/clients are encouraged to initiate innovation. In service delivery innovation processes both internal and external stakeholders act more as knowledge providers, hence stakeholders' collaboration is important. Alam (2002) describe collaboration with all stakeholders in the initiation stage as the process of gaining information and feedback on specific issues or an extensive consultation with stakeholders by means of interviews, focus group and team discussion. This helps to identify stakeholder requirements, facilitates innovation implementation, and prevents process-efficiency considerations from superseding the needs of all stakeholders.

Communication of service delivery innovation is the second dimension and step of the process. It is aimed at creating a clear and shared understanding of the nature of the new service to be provided, i.e. the service concept, how can managers/employees expect to design, implement and assess the success of the proposed new service. The information is communicated to secure buy-in with internal and external stakeholders as well as to show management commitment of the proposed innovations (Umashaker *et al*, 2011). Francis and Bessant (2005) argued that at this stage all stakeholders are informed through print and electronic communication systems of the organisation about the generation, acceptance, and implementation of new processes, products, or services for the first time within an organisational setting. It is through detailed communication and awareness that all stakeholders will engage actively in the process (Jansen 2005; Alam 2002).

Management of service delivery innovation is the third dimension and step of this process. This dimension focuses on leadership facilitation and support of service delivery innovation. Capacity to innovate is a core element of managing the process because it involves knowledge development and deployment of competence in order to introduce some new process, product, or idea in the organisation (Chen *et al*, 2009). According to Chase and Bowen (1991) the management of the innovation of a service delivery process by leadership should encompass the roles of the people (service providers), technology, physical facilities, equipment, and the specific processes by which the service is created and delivered. The framework for the innovation of the service delivery process should be based on the degree of standardisation, transaction volume per time period, locus of profit control, type of operating personnel, type of customer contacts, quality control, orientation of facilities, and motivational characteristics for

management and operating personnel (Goldstein *et al*, 2002).

Impact of service delivery innovation on customers and clients is the fourth and last step of the process. Managers face challenges when innovating services as they endeavour to increase process efficiencies, decrease costs, and increase service employee satisfaction, while also attempting to increase customer/clients satisfaction (Umashankar, Srinivasan & Hindman, 2011). Customer satisfaction is also an important component of improving service delivery through innovation as it enhances performance (Sijbom *et al*, 2015; Johnston *et al*, 2000). A positive impact of service delivery innovation in organisations implies that the organisation is able to fulfil its mandate, meet the needs and expectations of its stakeholders. Financial performance of the organisation is also another impact of service delivery innovation; hence it is used as a measure of innovation success. The effects of service innovation phenomena have by and large been assessed through perceptual rather than actual measures of organisational performance (Ordanini & Parasuram, 2011).

3 Research design and methodology

This section describes the research design, participants and sampling, measuring instrument and procedure as well as the statistical analysis of data.

3.1 Research design

In order to achieve the objective of the empirical study, a quantitative design using a cross-sectional survey was adopted because it enabled the researcher to collect data from a large population (Wellman, Kruger, & Mitchell, 2009).

3.2 Participants

The participants of this study were 289 employees of a South African government department. A simple random sampling approach was used in order to ensure that the sample would be representative of the population and unbiased (Terreblanche, Durrheim, & Painter, 2006). In terms of the sample size for this study, the researcher used the parameter that 200 to 500 participants are adequate for multivariate statistical analysis such as factor analysis (Avikaran, 1994).

3.3 Measuring instrument and procedure

The questionnaire consisted of two sections. Section A measured the participants' biographical details which included race, age, gender, tenure and job level.

Section B consisted of the Service Delivery Innovation Questionnaire which is a virtually self-administering survey and consists of 20 statements measuring the 4 dimensions of service delivery innovation namely initiation, communication,

management and impact on clients/customers. The statements of the questionnaire were configured using a five-point Likert scale ranging from 1, strongly disagree, to 5, strongly agree.

The ethical clearance to conduct the research in the organisation was granted by the management and the ethics committee of the department and research institution. An invitation to participate voluntarily in the study was sent to the employees. The questionnaire was completed during a group administration process facilitated by the researcher and it included a covering letter. The covering letter explained the purpose of the study and it explained ethical concerns such as anonymity, confidentiality, feedback and freedom of choice to participate in the study. The completed questionnaires were collected immediately by the researcher and were kept in a secure place.

3.4 Statistical analysis of data

Descriptive statistics data analyses were conducted in this study using the Statistical Package for Social Sciences. The descriptive statistics were used to analyse the biographic variables of the sample and the reliability of the questionnaire. In addition, the mean score ranking technique was conducted.

4 Results of the study

The findings of this study are presented firstly, focusing on the sample composition. Secondly, the reliability and descriptive statistics of the measuring instruments are discussed.

4.1 Sample composition

Table 1 presents the profile of the participants in this study. In terms of gender, 59.5% (n= 172) were female and 40.5% (n=117) were male. With regard to the different race groups of the participants, 78.9% (n=228) were African; 9.7% (n = 28) were white; 8% (n= 23) were coloured and 3.5% (n = 10) were Indian. Among the participants, approximately 22.1% (n = 64) were born between 1946 and 1964; 38.1% (n = 110) were born between 1965 and 1977 while 39.8% (n = 115) were born between 1978 and 2000. In terms of the participants' current position, 17% (n = 49) were in management positions; 46.3% (n = 134) occupied professional and specialist positions, while 36.7% (n = 106) were employed as general workers. In addition, 56.8% (n = 164) of the participants had been in the employ of the organisation from 1 to 5 years.

Table 1. Demographic profile of participants

Parameter	Frequency	Percentage (%)
<i>Gender</i>		
Male	117	40.5
Female	172	59.5
<i>Race</i>		
African	228	78.9
Coloured	23	8.0
Indian	10	3.5
White	28	9.7
<i>Age group</i>		
Born between 1978 and 2000	115	39.8
Born between 1965 and 1977	110	38.1
Born between 1946 and 1964	64	22.1
<i>Years of service</i>		
1 - 5 years	164	56.8
6 – 10 years	63	21.8
11 – 15 years	41	14.2
Over 16 years	21	7.2
<i>Current position</i>		
Management	49	17
Professional and specialist	134	46.3
General workers	106	36.7

4.2 Validity and reliability

In terms of the content and face validity of the instrument, the researcher asked a panel of five experts in employee and organisational performance to review the survey items in order to determine whether the content was suitable for measuring the intended constructs. In addition, a pilot study was conducted with a convenience sample of 30

participants as a pre-test of the instrument. The feedback from the panel of experts and pilot study was used to make changes to the instrument items, which included rewording and rephrasing items as well as deleting and adding items. With regard to the construct validity, the reliabilities of the factors were used to assess the construct validity and it was measured using Cronbach's alpha co-efficient.

Table 2. Number of items and reliabilities of the service delivery innovation dimensions

Factors/Dimensions	Number of items	Reliability
Initiating service delivery innovation	5	0.81
Communication of service delivery innovation changes	5	0.74
Management of service delivery innovation	5	0.70
Impact of service delivery innovation on customers/clients	5	0.72
Overall	20	0.74

The Cronbach's alpha coefficients for the four service delivery innovation factors or dimensions are presented in Table 2 above. The results of the coefficients are considered to be satisfactory because they were significantly greater than the recommended 0.70 (Terreblanche *et al.*, 2006).

They varied from 0.81 (Initiating service delivery innovation), 0.74 (Communication of service delivery innovation changes), 0.70 (Management of service delivery innovation) to 0.72 (Impact of service delivery innovation on customers/clients). The overall reliability of 0.74 indicates that the measure has good internal consistencies and is a valid measure of service delivery innovation.

4.3 Means and standard deviations for service delivery innovation

Table 3 presents the mean scores of the survey used in this study. The summated means for the four service

delivery innovation dimensions indicate that the management of service delivery innovation dimension was ranked highest (m=4.31); followed by communication of service delivery innovation changes dimensions (m= 3.42); initiating service delivery innovation dimension (m=3.22) and the impact of service delivery innovation on customers/clients dimensions (m= 3.01). This ranking of the means score results indicates that the employees in this organisation have a positive perception of all the four dimensions of service delivery innovation. The fact that the mean scores for all the four dimensions and the overall mean were between the "agree" and "strongly agree" ratings on the Likert scale reflect that these employees seem to have satisfactory or positive perceptions of service delivery innovation in their organisation.

Table 3. Means scores, standard deviations and rank order of service delivery innovation dimensions

Factor/Dimensions	Mean score	Standard deviation	Position in rank order
Initiating service delivery innovation	3.22	0.807	3
Communication of service delivery innovation changes	3.42	0.822	2
Management of service delivery innovation	4.31	0.913	1
Impact of service delivery innovation on customers/clients	3.01	0.781	4
Overall mean score			3.81

5 Discussion of results

The main purpose of this study was achieved which was namely; to determine the perceptions and nature of service delivery innovation among employees of a South African government department. Overall the results of this study indicate that employees in this government department seem to have a positive perception of service delivery innovation in their organisation. According to Sijbom *et al* (2015); this is critical in today's complex and highly competitive environment because organisations need to be continuously innovative in order survive and prosper.

The positive perception regarding initiating service delivery innovation in the organisation implies that employees are encouraged to propose initiatives that can improve and enhance service delivery in the organisation. Shalley, Zhou and Oldham (2004) argued that when employees are allowed to be innovative they are able to produce novel, potential useful ideas about organisational practices, products,

practices, services or procedures. Engaging all internal and external stakeholders creates a culture of innovation and provides the organisation with valuable feedback and inputs for initiating innovation from stakeholders (Chase & Bowen, 1991; Lovelock & Wright, 2002).

Leaders can influence the communication and management of innovative service delivery because of their power over the allocation and distribution resources and support. They fulfil a key role in managing bottom up creativity or innovation, since leaders determine which initiatives are able to succeed (Janssen, 2005; Edvardsson & Olson, 1996). The respondents of this study's positive perception of the communication, implementation and management of service delivery innovation indicate management support and commitment to innovation through the allocation of human and financial resources. Several and a wide variety of decisions required to design, implement and deliver an innovative service. Hence management and leadership that is service oriented is

important at several levels in the organisation; from the strategic level to the operational and service encounter levels (Goldstein *et al*, 2002; Chase & Bowen, 1991).

The impact of service delivery innovation on clients or customers is critical because it involves understanding the needs of customers or clients in the target market and aligning this with the organisation's strategy and competitive intentions (Edvardsson & Olsson, 1996; Chen *et al*, 2009). Results of this study suggest that employees in this organisation perceive the impact of service delivery innovation to be positive to their clients and customers who are members of the public or citizens. This implies that service delivery innovation in this context encourages the department to understand, satisfy public/citizens' needs and to fulfil its mandate. According to Johnston and Clark (2001) organisations are able to make a positive impact of service delivery innovation when they can provide a detailed description of the customer/clients' needs to be satisfied, how they are to be satisfied, what is to be done for the customer, and how this is to be achieved through innovation.

6 Conclusion, limitations, contributions for future research and management practice

The purpose of this study was to investigate the perceptions and nature of service delivery innovation among government department employees. This aim was achieved using the exploratory study, which indicates that the sample representatives of employees in this organisation have a positive perception of their organisation's service delivery innovation process involving initiation, communication, management and impact on customers and clients. This study adds to the existing knowledge on service delivery innovation process in a public service organisation.

In terms of the limitations, this study was conducted in one province rather than in all nine provinces where the department has offices. This geographic limitation implies that the study was restricted to a single geographic context. The second limitation is based on the fact that a cross-sectional survey was used rather than a longitudinal survey which might yield different results. Future research could focus on longitudinal studies to explain service delivery innovation in public service or government department. In addition, future studies could investigate perceptions of organisational justice across the different government departments in all provinces.

The findings of this study have a number of implications for management in public or government department. Managers and employee in government departments are constantly involved in the development and implementation of service delivery innovation processes, standards and frameworks that are supposed to address the dimensions highlighted in this study.

References

1. Alam, I. (2002). An Exploratory Investigation of User Involvement in New Service Development. *Journal of the Academy of Marketing Science*, 30 (3), 250-261.
2. Avikaran, N. K. (1994). Developing an instrument to measure service quality in branch banking. *International Journal of Bank Marketing*, 12 (6), 10 – 18.
3. Baker, W. E. & Sinkula, J. M. (2007). Does Market Orientation Facilitate Balanced Innovation Programs? An Organizational Learning Perspective. *Journal of Product Innovation Management*, 24 (4), 316-334.
4. Chase, R. & Bowen, D.E. (1991). Service quality and the service delivery system. In: *Service Quality: Multidisciplinary and Multi-National Perspectives*. Lexington Books, Lexington, MA.
5. Chen, J. S; Tsou, T. H & Huang, A. Y (2009). Service Delivery Innovation: Antecedents and Impact on Firm Performance. *Journal of Service Research*, 12 (1), 36-55.
6. Edvardsson, B. & Olsson, J. (1996). Key concepts for new service development. *The Service Industries Journal*, 16, 140–164.
7. Francis, D. & Bessant, J. (2005). Targeting Innovation and Implications for Capability Development. *Technovation*, 25 (3), 171-183.
8. Goldstein, S. M; Johnston, R; Duffy, J & Rao, J. (2002). The service concept: the missing link in service design research? *Journal of Operations Management*, 20, 121–134.
9. Janssen, O. (2005). The joint impact of perceived influence and supervisor supportiveness on employee innovative behaviour. *Journal of Occupational and Organisational Psychology*, 78, 573 -579.
10. Johnston, R. & Clark, G.(2001). *Service Operations Management*. Prentice-Hall, Harlow, United Kingdom.
11. Lovelock, C.H. & Wright, L. (1999). *Principles of Service Management and Marketing*. Prentice-Hall, Englewood Cliffs, New Jersey.
12. Ordanini, A & Parasuram, A. (2011). Service Innovation Viewed Through a Service-Dominant Logic Lens: A Conceptual Framework and Empirical Analysis. *Journal of Service Research*, 14 (1), 3-23.
13. TerreBlanche, M., Durrheim, K., & Painter, D. (2006). *Research in practice: applied methods for the social sciences*. Cape Town: University of Cape Town Press.
14. Shalley, C.E., Zhou, J & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30, 933 – 958.
15. Sijbom, R. B. L, Janssen, O & Van Yperen, N. W. (2015). Leaders receptivity to subordinates' creative input: The role of achievement goal and composition of creative input. *European Journal of Work and Organisational Psychology*, 24 (3), 462 – 478.
16. SPSS Inc. (2006). SPSS version 14.0 for the Microsoft Windows platform. Chicago: SPSS Inc.
17. Umashankar, N; Srinivasan. R & Hindman, D. (2011). Developing Customer Service Innovations for Service Employees: The Effects of NSD Characteristics on Internal Innovation Magnitude. *Journal of Service Research*, 14 (2), 164-179.
18. Vargo, S. L. & Robert F. L. (2008). "Why Service?" *Journal of the Academy of Marketing Science*, 36 (1), 25-38.
19. Welman, C., Kruger, F., & Mitchell, B. (2009). *Research methodology*. Cape Town: Oxford University Press.

COMPETITIVE INTELLIGENCE AWARENESS IN THE SOUTH AFRICAN PROPERTY SECTOR

*Tshilidzi Eric Nenzhelele**

Abstract

The South African property sector contributes highly to job creation, alleviation of poverty and economic growth. Although South Africa has dropped in the global competitiveness ranking, the property sector of South Africa remains very competitive. To survive in a competitive business environment firms seek for tools that offer competitive advantage. It is widely reported the competitive intelligence provide firms with competitive advantage over rivals. Although the awareness of competitive intelligence has been examined in other sectors in South Africa, no study on the awareness of competitive intelligence has yet been conducted in the property sector. This study aims at establishing the extent to which property practitioners are aware of competitive intelligence**.

Keywords: Awareness, Competitive Intelligence, Competitive Advantage, Decision-Making, Property Practitioners, Property Sector

**Department of Business Management, University of South Africa, P.O. Box 392, Pretoria, 0003*

Tel: +27 12 429 3756

Fax +27 86 694 6436

*** This work is based on the research supported by the National Research Foundation. The authors would also like to acknowledge the University of South Africa (South Africa) for the funding and support without which this research would not have been possible.*

1 Introduction

Competitive intelligence (CI) improves the quality of products or services, decision-making and the quality of life (Maune, 2014; Du Toit and Sewdass 2014). Moreover, CI provides competitive advantage to firms that are practicing CI (Fatoki, 2014). For these reasons, large and small, public and private and profit and non-profit organisations are practicing CI (Nenzhelele, 2012). Developed countries are more competitive than developing countries because they are at an advanced stage of CI practice (Fatti and Du Toit, 2013). Although South Africa, as a developing country, is competitive, its global competitiveness rating has dropped sharply (The Global Competitiveness Report, 2014-2015). However, the property sector of South Africa remains competitive (EAAB annual report, 2013/2014).

The South African property sector contributes greatly to job creation, skills development, the alleviation of poverty; and to economic growth – It contributes R191.4 billion to the South African economy (http://www.eaab.org.za/property_sector_charter_council). Although the practice and awareness of CI has been researched in other sectors of South Africa, no research has been conducted into the property sector of South Africa. The purpose of this research is to establish the extent to which the property sector of South Africa is aware of CI.

2 Literature review

2.1 Definition of competitive intelligence

There are so many definitions of CI in the literature (Weiss and Naylor, 2010). According to (Brody, 2008), some scholars define CI as a product while others define it as a process. Roitner (2008) concludes that CI is both a product and a process. Most of these definitions differ because of a change in the wording and the use of synonyms and emphasis (Brody, 2008). It has been argued that CI practitioners are too busy and they do not have time to define CI (Fleisher and Wright, 2009). The existence of so many definitions in the field of CI creates confusion among scholars and practitioners (Colakoglu, 2011). Also, it results in CI becoming a practice with unstable borders (Haddadi, Dousset and Berrada, 2010). Due to a lack of agreement on the definition of CI, it has been confused with industrial espionage (Colakoglu, 2011). However, CI is different from industrial espionage, because it is legal and ethical (Haliso and Aina, 2012). Having realised the problem of endless definitions, Pellissier and Nenzhelele (2013) analysed 50 definitions of CI to establish commonality and differences in order to propose a comprehensive and universally acceptable definition. Pellissier and Nenzhelele (2013) define CI as “a process or practice that produces and disseminates actionable intelligence by planning, ethically and legally collecting,

processing and analysing information from and about the internal and external or competitive environment in order to help decision-makers in decision-making and to provide a competitive advantage to the enterprise.” This definition will be used for the purpose of this study.

2.2 Evolution of competitive intelligence

CI evolved from economics, marketing, military theory, information science and library and strategic management (Juhari and Stephens, 2006; Deng and Luo, 2010). The governments of countries rely on intelligence for the protection of their citizens (Deng and Luo, 2010); marketing departments of firms all over the world rely on intelligence for marketing, pricing and promoting their products or services (Nasri and Zarai, 2013); libraries rely on intelligence to provide quality sources of information to scholars (Fleisher, 2004); and strategists rely on intelligence to anticipate and prepare for future competition (Barrett, 2010).

CI has been around longer than the first time it was officially practiced in business and recorded in the literature (Juhari and Stephens, 2006). Since its inception, CI has been practiced by public, private, profit, non-profit, large and small organisations. While CI is a relatively new business discipline, it is becoming increasingly complex and important to keep up with rapid business development (Heppes and Du Toit, 2009). Due to its benefits, more organisations are practicing CI either formally or informally (Nenzhelele, 2012).

Post-apartheid, South African firms have been exposed to global competition (Pellissier and Nenzhelele, 2013) and these firms are practicing CI to survive in the midst of global competition (Du Toit and Sewdass, 2014). This is confirmed by Muller (2006) who points out that CI took root in South Africa in the mid-1990s and early-2000s. CI in South Africa emerged from the business sector (Heppes and Du Toit, 2009). Although South African firms always had the tendency to be inward looking, they are starting to realise the importance of CI from year to year (Adidam, Gajre and Kejriwal, 2009). De Pelsmacker, Muller, Viviers, Saayman, Cuyvers and Jegers (2005) point out that enterprises that formally practice CI are growing in numbers and that CI is especially strong in the banking sector, the information technology sector, the telecommunications sector and the electric supply sector. Although CI practice has been widely reported for large organisations, Nenzhelele (2012) establishes that smaller enterprises in South Africa are also practicing it. Although CI is practiced widely in South Africa in profit organisations, there is lack of report of CI practice in non-profit organisations (Sewdass and Du Toit, 2014).

2.3 Competitive intelligence needs

Managers are paying more attention to CI and as a result there is a growing desire to fulfil CI needs (Barnea, 2014; Lin and Yan-Zhang, 2015). The end product of CI must satisfy the needs of decision-makers and trigger new intelligence needs (Bartes, 2014a; Pinto, 2014). In order to have intelligence needs that are clear, unambiguous and easy to understand, there has to be two-way communication between the CI unit and the decision-makers (Nasri and Zarai, 2013; Du Toit and Sewdass, 2014). Formal meetings must be organised for CI practitioners and decision-makers to discuss intelligence needs (Bartes, 2014b). Decision-makers have plenty of intelligence needs that must be differentiated from information needs, prioritised and translated into key intelligence topics. (Prescott, 1999; Nasri, 2011; Bartes, 2014b; Degaut, 2015). KITs are those decision-based, strategic issues about which managers must be regularly informed to set and implement strategy (Herring, 1999). CI is aimed at answering KITs (Bartes, 2014b). According to Herring (1999), only intelligence needs that are of highest priority and key to the success of the organisation must be fulfilled with the scarce resources. KITs are established and clearly defined during the planning phase of the CI process (Bulley, Baku and Allan, 2014; Yassine, 2014). KITs can come from different levels of management such as strategic, functional and tactical management (McGonagle and Vella, 2012). Quality CI depends on clearly defined and unambiguous KITs (Nasri, 2011; Bartes, 2014b).

According to Barnea (2014), KITs must cover world competition and tactical and strategic issues instead of just local competition and tactical-related issues. It is impossible to gain competitive advantage from CI without clearly defined KITs (Barnea, 2014). According to Herring (1999), there are three categories of KITs, namely strategic decisions and actions; topics requiring early warning and profiles; and characteristics and descriptions of the key players. Strategic decisions and actions include the development of strategic plans and strategies. Early warning topics include competitor initiatives, technological surprise and government actions. Descriptions of key players include competitors, customers, suppliers, regulators, and potential partners.

2.4 Competitive intelligence awareness

Competitive intelligence growth depends on the creation of awareness of its benefits and a change in the way in which enterprises deal with information and how they view it (Muller, 2007). In today's global competitive business environment, only businesses with a CI awareness programme will survive (Căpăţină and Vanderlinden, 2012; Bourret 2012). CI awareness helps raise competitiveness in a sector

which increases the quality of products and services (Wright, Bisson and Duffy, 2012). CI awareness is a critical success factor for CI (Nasri and Zarai, 2013). Although there is a rise in CI awareness, there is still a need for enterprises to raise awareness of CI (Garcia-Alsina, Ortoll and Cobarsi-Morales, 2013; Bartes, 2014b). According to Smith, Wright and Pickton (2010), there is a dearth in the literature regarding the awareness of CI.

Du Toit and Sewdass (2014) and Fatti and Du Toit (2013) recommend that South Africa enterprises develop a competitive culture and create CI awareness among their employees. Raising CI awareness among employees is a major challenge and without a culture of CI awareness it is difficult to develop actionable CI (Nasri, 2012; Barnea, 2014). Employees who are unaware of CI tend to give away information cheaply to competitors; and they still get misinformed by competitors who are well aware of CI (Singh and Vij, 2012; Wright, Bisson and Duffy, 2012). Smith et al (2010) identify the following methods of raising CI awareness: conferences, seminars, speeches and “breakfasts”; financial assistance; education and training and collaborating entities. Nenzhelele (2012) identified the following methods of raising CI awareness: magazines; the internet; trade shows; social networks; friends and families; business associates, blogs, competitors; television; workshops; business meetings, newspapers; and government finance.

2.5 Benefits of competitive intelligence

CI benefits all types of enterprises, including profit and non-profit enterprises, associations and government (Liu and Oppenheim, 2006). According to Hesford (2008), CI is a process that can reduce information uncertainty to such an extent that decision-makers can make better decisions on cost reductions; design and process improvements, new product introductions, product mix choices, and so forth. In addition, Muller (2007) points out that CI fulfils a strategic role in enterprises by providing quality information; increasing general awareness; and improving the identification of threat and opportunity. The benefits of obtaining CI for businesses outweigh the costs by far. The four major benefits are as follows: differentiation; cohesive marketing communication plans; pre-selling an idea to the target market and building credibility with the customers (Johns and Van Doren, 2010).

Pranjic (2011) lists the following benefits of CI: detecting profitable market niches, the strengths and weaknesses of competitors, warning signals in the instance of political instability, recession signals, new administrative and legal possibilities and limitations and new or potential competition; enhancing the reliability of prognoses of leading forces in a business environment; decoding competitors’ intentions; improving the enterprise’s ability to anticipate

surprises; improving managers’ analytical skills; faster and more targeted responses to market changes or reduced reaction time; identifying critical points of vulnerability; early warning of competitive threats; identifying blind spots; synchronising information from all providers; conducting accurate market-place assessments for tactical moves; improving quality in strategic and tactical planning; an increased understanding of customers’ current and future needs; and increasing enterprise learning and sharing of knowledge.

Businesses need both tangible and intangible benefits when investing in resources or systems. They want to know why they must spend their money on CI. If the benefits of a resource or system outweigh its disadvantages, they are more likely to invest in the resource or system. Enterprises that are aware of CI will realise that it offers them many benefits and will invest in it and practice it because it will help them to make quality decisions.

2.6 The property sector of South Africa

The property sector of South Africa is an economic enabler and allows upward economic mobility for future generations (Estate Agency Affairs Board (EAAB) annual report, 2013/2014). It contributes to job creation, wealth creation, skills development and quality of life. It is attractive for investors, facilitates inheritance and creates wealth and alleviates poverty (EAAB annual report, 2012/2013). According to the EAAB annual report (2013/2014), the property sector fulfils the constitutional rights of South Africans, because it gives South Africans an opportunity to own a home. Moreover, property ownership enables access to capital, creates income streams and a sense of security.

However, since the 2008 economic meltdown, the property sector has been striving to recover (EAAB annual report, 2010/2011). Many estate agencies have been shut down due to a lack of funds to sustain them. Many estate agencies owned by people from disadvantaged backgrounds are struggling to survive under these economic conditions (EAAB annual report, 2013/2014). The National Credit Act has contributed to the slow growth of the property sector due to strict measures to protect consumers from sinking into debt (EAAB annual report, 2008/2009). However, the growth of the property industry has picked up from year to year. There has been an increase in principal and non-principal agents, firms and attorneys registered with the EAAB (EAAB annual report, 2013/2014) which makes the property sector very competitive (EAAB annual report, 2010/2011). To remain competitive, more and more property practitioners are listing property on the internet which makes them easily accessible and viewable by consumers. There are many websites in South Africa designated for listing properties and reporting property sector trends. Potential consumers

login to these websites in order to search for properties to buy or to let. These websites also allow individuals to list their properties for sale or to make them accessible for buyers, lessees or estate agents.

The South African property sector is regulated and controlled by the EAAB (Estate Agency Affairs Act 112 of 1976). The EAAB was established in 1976 in terms of the Estate Agency Affairs Act 112 of 1976. Since 17 May 2012, the EAAB has relocated from the Department of Trade and Industry to the Department of Human Settlement (EAAB annual report, 2013/2014). The core mandate of the EAAB remains the following five key regulatory pillars: registration, education, inspections and investigation and discipline; and claims and its industry supervisory role in terms of the Financial Intelligence Centre Act (EAAB annual report, 2009/2010). According to the EAAB annual report 2013/2014, the EAAB regulates and controls the activities of estate agents in the public interest. Moreover, the EAAB ensures that all estate agents that serve the public are registered. The report indicates that each registered estate agency is issued with a fidelity fund certificate which is renewable every year and serves as registration evidence. The fidelity fund certificate also confirms that the estate agency is legally entitled to carry out the activities of an estate agency. The EAAB is also mandated to train and educate estate agents. It does so by introducing improved education and training standards and setting requirements for practical experience (EAAB annual report, 2013/2014). This is meant to professionalise estate agents and ensure that they serve the public professionally and honestly. It also meant to ensure that estate agent is regarded as a professional career which can be considered by young people straight from high school. For this purpose, the EAAB has introduced a 12-month internship programme for potential estate agents. During this 12-month period, the intern estate agent will work under the supervision of a principal estate agent. This is to ensure that the intern estate agent acquires meaningful practical experience.

The EAAB investigates complaints against estate agents and institute disciplinary proceedings (EAAB annual report, 2012/2013). According to the EAAB annual report, 2012/2013, the EAAB receive so many complaints from different stakeholders regarding the service they receive from estate agents. This is because some estate agents take advantage of ignorant customers who do not know about selling or purchasing properties. However, some knowledgeable customers report contraventions of the Estate Agency Affairs Act, theft or mismanagement of trust money (EAAB annual report, 2013/2014). According to the report, other complaints relate to the contravention of the Code of Conduct of Estate Agents. To solve the problem, the EAAB has implemented a mediation process which makes it possible to resolve complaints without resorting to formal disciplinary proceedings (EAAB annual report, 2011/2012) The EAAB annual

report 2011/2012 points out that some cases are referred to different courts and if estate agents are found guilty, their fidelity fund certificates are withdrawn. The EAAB also conduct inspections at estate agencies to ensure that there is compliance (EAAB annual report, 2013/2014). Non-complying estate agencies are referred to the disciplinary process (EAAB annual report, 2010/2011). The EAAB encourages whistleblowing to reduce unethical behaviour by estate agencies (EAAB annual report, 2013/2014). According to the EAAB annual report 2013/2014, consumer education is another measure that the EAAB uses to reduce unethical behaviour by estate agencies.

Money laundering activities among some estate agencies have also been reported (EAAB annual report, 2013/2014). In order to eliminate activities of money laundering, the Estate Agencies Affairs Board (EAAB) is working closely with the Financial Intelligence Centre (FIC). Some estate agencies have been charged and they have lost their fidelity fund certificates due to unethical behaviour in managing their trust accounts (EAAB annual report, 2012/2013). Some of these unethical behaviours include theft of trust account money or using money for irrelevant purposes.

There are many estate agencies, principal estate agents, non-principal estate agents, intern estate agents and attorneys registered with EAAB (EAAB annual report, 2013/2014). By March 2014, 10757 principal estate agents, 14013 non-principal estate agents, 15671 intern estate agents, 8708 firms and 89 attorneys were registered with the EAAB. They all pay levies for the fidelity fund certificate or the renewal thereof, enabling the EAAB to perform its mandates. For compliance purposes and as a monitoring tool, estate agencies are required to submit the auditor's report annually. Failure by estate agencies to submit the auditor's report four months after the financial year of the firm leads to the non-issuing or withdrawal of their fidelity fund certificate. Subsequently, this leads to a reduction in registered and legally permitted estate agencies and an increase in unregistered and illegal estate agencies. After the end of apartheid, in South Africa, there has been an increase in demand for property among previously disadvantaged customers. The increase in customers makes the property sector very competitive (EAAB annual report, 2013/2014).

The EAAB has started an alliance with other organisations to fulfil its mandates and protect consumers from unscrupulous estate agencies (EAAB annual report, 2013/2014). According to EAAB annual report 2013/2014, the EAAB works together with the following organisations: Independent Regulatory Board for Auditors, SAICA, National Consumer Commission, Financial Services Board, Banking Association of South Africa, Service SETA, Black Conveyancers Association and the FIC. The EAAB is also a member of the Association of Real

Estate License Law Officials (ARELLO) and international organisation of real estate regulators. As a result, the EAAB is able to contribute to the international real estate sector. Its membership to ARELLO allows EAAB to remain in the forefront of the international property sector. Therefore, EAAB is aware of best practices and puts the South African property sector in a better position in the world property sector. This makes the South African property sector attractive, competitive, secure and safe for international investors (EAAB annual report, 2013/2014).

3 Research methodology

The research was quantitative by nature and a web-based questionnaire was used to collect data from the estate agencies. The questionnaire was validated by a group of academics knowledgeable in the field of CI. A 5-point Likert scale was used to establish the level of agreement to statements about competitiveness and competitive intelligence awareness. The scales ranged from strongly disagree to strongly agree. The contact details of 3878 estate agencies were sourced from one of South Africa's famous property websites. Of these estate agencies, 350 were randomly sampled for the purpose of this research. The names of the estate agencies were placed in a basket for a lottery draw. The contact details of the sampled estate agencies were then sourced from the original database. An e-mail was sent to the sampled estate agencies with a link to the web-based questionnaire. By completing the questionnaire, the property practitioners consent that their response will be used for the purpose of the research. For every e-mail that sent back a delivery failure, a new estate agency was sampled to replace it. Two hundred and forty two responses were received, yielding a response rate of 69.14%. Only 239 questionnaires completed were usable. Reminder e-mails were sent to sampled estate agencies to increase the response rate. Data was collected over a period of one month. The web-based questionnaire was exported to a spreadsheet for analysis. The internal data reliability was calculated to be 0.9129 (Cronbach' Alpha).

4 Research results

4.1 Demographics

According to Nieman (2006), there are four forms of enterprises in South Africa, namely company, close corporation, partnership and proprietorship. They are defined as follows: proprietorship: an enterprise that has one owner and there is no distinction between the personal estate of the owner and the business estate. Partnership: an enterprise formed when a minimum of two and a maximum of 20 people conclude an agreement to do business as a partnership. Close corporation (CC): a separate legal entity regulated in

terms of the South African Close Corporation Act 69 of 1994. The CC must be registered in terms of this Act in order to attain separate legal entity status. A CC must have at least one member and not more than 10 members. Company: an association of people incorporated in terms of the Companies Act 61 of 1973. A company can have share capital or can be incorporated not for gain, in which case it will not have share capital. Firms that participated in this research were companies (42.86%); close corporations (29.06%); sole proprietorships (23.65%); and partnerships (4.43%). There are nine provinces in South Africa. The majority of the estate agencies operate their business in Gauteng (40.39%) and Western Cape (28.57%). The other provinces were represented as follows: KwaZulu-Natal (8.87%); Free State (7.39%); Eastern Cape (3.45%); Mpumalanga (3.45%); Limpopo (2.96%); Northern West (2.96%); Northern Cape (1.97%). Their focus areas were property rentals, sales, management and development (68.47%), sales only (28.57%) and rentals (2.96%). The majority of estate agencies were very small with 1 to 5 employees (45%). The rest of the estate agencies had 6 to 10 employees (29.56%); 11 to 20 employees (15.27%); 21 to 50 employees (5.42%); 20 to 200 employees (2.96%); and 201 or more employees (1.48%). Financially, the majority of the estate agencies (36.95%) were making a total annual turnover of R1m to R5m. However, 32.51% were making a total annual turnover of less than R1m. A reasonable percentage of estate agencies (12.32%) were making a total annual turnover of more than R64m. Other estate agencies were making R6m to R10m (9.36%); R21m to R30m (5.91%); R31m to R50m (1.48%); and R51m to R64m (1.48%). The majority of the estate agencies had been operating their business for 6 or longer (60.59%). The other estate agencies had been in business for 3 to 5 years (25.12%), 1 to 3 years (10.34%) and less than 1 year (3.94%). The majority of the respondents were owners/managers of the estate agencies (82.18%). The other respondents were property practitioners (10.40%), sales/marketing managers (6.93%) and competitive intelligence professionals (0.50%).

4.2 Competition in the property sector

With regard to competition in the property sector of South Africa, the majority (50.63%) of estate agencies indicated that competition is too high in the property sector. Only 20.92% of the estate agencies disagreed that competition is too high in the property sector while 28.45% neither agreed nor disagreed. Therefore, a mean value of 3.42 indicates that the majority of estate agencies agree that competition is too high in the property sector. A standard deviation of 1.07 indicates that there was wide spread responses to this variable.

4.3 The awareness of competitive intelligence

Regarding the awareness of competitive intelligence, 90.79% of the estate agencies indicated that they are aware of competitive intelligence. Only 4.19% indicated that they are not aware of competitive intelligence and the remaining estate agencies (5.02%) neither agreed nor disagreed. A mean value of 4.21 indicates that the majority of the estate agencies agreed that they are aware of competitive intelligence. A standard deviation of 0.79 indicates that the responses to the awareness of competitive intelligence variable were less spread. Concerning the employees' understanding of competitive intelligence, 74.06% indicated that their employees understand what

competitive intelligence is all about. Only 7.95% of the estate agencies indicated that their employees do not understand competitive intelligence; and the remaining 17.99% neither agreed nor disagreed. Therefore, a mean value of 3.81 indicates that the majority of estate agencies agreed that their employees understand what competitive intelligence is. A standard deviation of 0.88 indicates that the responses to the employees' understanding of competitive intelligence variable were less spread. When asked how they became aware of competitive intelligence, the majority of the estate agencies indicated that they become aware of competitive intelligence through education and training. Table 1 below shows the competitive intelligence awareness methods.

Table 1. Competitive intelligence awareness methods

Awareness method	Percentage response
Education and training	67.13%
Internet	47.69%
Business associates	43.52%
Social network	31.48%
Business meeting	24.54%
Newspaper	21.30%
Competitor	20.83%
Seminar	20.37%
Magazine	18.98%
Conference	16.20%
Workshop	14.81%
Friends and family	12.96%
Collaborating entities	10.65%
Television	6.48%
Trade show	6.02%
Blog	2.78%
Speech	2.31%
Government finance	0.93%

5 Discussion

The majority of estate agencies in South Africa are registered as companies and very few are partnerships. Perhaps this is because the EAAB requires estate agencies to submit annual audit reports. It could also be because estate agencies want to be able to sell shares to the public to acquire resources required for competitiveness. Most of these estate agencies operate their business in Gauteng province while a few operate in Northern Cape Province. Gauteng province is the economic hub of South Africa and has resources and infrastructure that enables businesses to operate and survive. A large number of estate agencies do property sales, rentals; management and development and only a few do property rentals only. Considering that the majority of the estate agencies are very small, one wonders how they manage to do property sales, rentals, management and development. Perhaps the listing of properties on public websites allows them to

render all these services. The internet has opened many opportunities for business and this is why the country invests lots of money in telecommunication infrastructure. The majority of the estate agencies are very small with 1 to 5 employees while very few had 201 or more employees. Perhaps this is because many people do not regard estate agent as a career choice as yet. However, the EAAB ensures that estate agencies are professional enough to attract more people to consider estate agent as a career choice. Most estate agencies are making a total annual income of R1m to R5m while only a few are making R31m to R50m and R51m to R64m. With fewer resources, it is no surprise that some of the estate agencies fail to submit their audit report on time. Estate agencies are not making enough to re-invest and grow. The majority of the estate agencies have been operating for more than six years while very few have been operating for less than a year. The estate agencies are experienced enough to know how the sector works. The EAAB takes

advantage of the experience of estate agents by using them as mentors in the education programmes. This has led to an increase in the number of estate agents registered with the EAAB. It also enhances the credibility of the education offered by the EAAB. Since the majority of estate agencies are small, they are being run by an owner/manager. It is widely recorded that small businesses are managed and run by the owner. This is because small businesses lack funds to employ and pay specialised managers.

While South Africa has dropped in the global competitiveness report 2014/2015, the property sector remains competitive. The majority of the estate agencies agreed that competition is too high in the South African property sector. High competition benefits the customers, in this case property consumers. When competition is high, firms must offer quality service to survive; and firms tend to seek for tools that provide them with competitive advantage over their rivals. It has been widely reported that competitive intelligence help firms to gain competitive advantage over their rivals. Contrary to the plea by scholars to raise awareness of CI, almost all the estate agencies indicated that they are aware of competitive intelligence.

The majority of estate agencies indicated that their employees have an understanding of CI. This means that estate agencies are aware of their internal and external environment. Therefore, they are ready to adapt to the changes in the environment surrounding the property sector. The majority of estate agencies indicated that they had become aware of competitive intelligence through education and training. This concurs with existing literature that education and training is the dominant method of raising competitive intelligence awareness. The EAAB is attempting to improve its education offering and trusts that education will make the property sector more competitive, ensures professionalism and compliance to code of conduct. The internet and business associates also played an outstanding role in raising competitive intelligence awareness in the South African property sector. The internet has been labelled as the greatest source of information for any topic of investigation. It is no surprise that a larger number of estate agencies became aware of CI through the internet. Business associates share information and make themselves aware of available business tools such as competitive intelligence.

6 Conclusion

Despite the fact that South Africa has dropped in the global competitiveness report, the South African property sector remains very competitive. The majority of property practitioners agree that competition is too high in the property sector of South Africa. This is in spite of the fact that the majority of the estate agencies are very small in that they employ at most five employees and make an annual turnover

up to five million rand. The sector remains competitive with fewer resources at their disposal. This is evident in that the property sector contributes highly to job creation, wealth creation, poverty alleviation, and economic development and growth.

Contrary to the plea by scholars to raise CI awareness in South Africa, the property sector of South Africa is aware of CI to a greater extent. This is evident in that the employees have an understanding of CI. They are aware of the competitive environment in which they operate. The majority of estate agencies have become aware of CI through education and training and the internet and business associates. Education and training remain the leading methods of raising awareness of CI. The EAAB is constantly looking for better ways of improving educational offerings. The internet, that has recently been labelled a human right among some estate agencies, is also an important method for raising CI awareness. The South African government has made investments in the upgrade of telecommunication infrastructure to ensure that everyone within the borders of the country is able to access the internet. The EAAB creates platforms for property practitioners to meet one another and share information in roadshows and seminars; no wonder a large number of estate agencies become aware of CI through business associates.

Firms practice CI in order to survive in a highly competitive business environment. This is because CI offers competitive advantage; assists in making quality decisions; improves the quality of products or service and quality of life. There has been a cry to raise CI awareness in all sectors of South Africa. The results of this research show that the property sector of South Africa is aware of CI to a greater extent through education and training, the internet and business associates. There is, therefore, a lesser need to raise CI awareness in the property sector of South Africa.

7 Recommendation and future research

The EAAB and other educational institutions must offer educational programmes in CI. The government of South Africa must work with other organisations to ensure easy, uninterrupted internet access for everyone. The EAAB must continually organise events in which estate agencies meet to share information. This will ensure continual awareness of CI and possible practice.

Future research must be conducted to establish why education and training is the leading method of raising CI awareness; the aspects of CI which are included in the EAAB educational offering; the types of internet applications that are used to raise CI awareness; and the topics discussed in the EAAB which raise CI awareness.

References

1. Adidam, T.J., Gajre, S. and Kejriwal, S. (2009), "Cross-cultural competitive intelligence strategies", *Marketing Intelligence and Planning*, Vol. 27 No. 5, pp. 666-680.
2. Barnea, A. (2014), "Competitive Intelligence in the Defense Industry: A Perspective from Israel – A Case study analysis", *Journal of Intelligence Studies in Business*, Vol. 4 No. 2, pp. 91-111.
3. Barrett, S.E. (2010), "Competitive Intelligence: Significance in Higher Education", *World Future Review* August-September 2010, pp. 26-30.
4. Bartes, F. (2014)a, "Defining a basis for the new concept of competitive intelligence", *ACTA Universitatis Agriculturae ET Silviculturae Mendelianae Brunensis*, Vol. 62 No. 6, pp. 1233-1242.
5. Bartes, F. (2014)b, "The objectives of competitive intelligence as a part of corporative development strategy", *ACTA Universitatis Agriculturae ET Silviculturae Mendelianae Brunensis*, Vol. 62 No. 6, pp. 1243-1250.
6. Bourret, C. (2012), "Standards, Evaluation, Certification and implications for the study of Competitive Intelligence", *Journal of Intelligence Studies in Business*, Vol. 2 No. 1, pp. 59-67.
7. Brody, R. (2008), "Issues in defining competitive intelligence: An exploration", *Journal of Competitive Intelligence and Management*, Vol. 4 No. 3, PP. 3-16.
8. Bulley, C.A., Baku, K.F. and Allan, M.M. (2014), "Competitive Intelligence Information: A Key Business Success Factor", *Journal of Management and Sustainability*, Vol. 4 No. 2, pp. 82-91.
9. Căpățină, A. and Vanderlinden, B. (2012), "Modelling the Dimensions of a Competitive Intelligence – Based Corporate Culture Using the Digital Memory BRAIN 7", *Review of International Comparative Management*, Vol. 13 No. 3, pp 366-377.
10. Colakoglu, T. (2011), "The problematic of competitive intelligence: How to evaluate and develop competitive intelligence", *Procedia – Social and Behavioral Sciences*, Vol. 24 No. 1, pp. 1615-1623.
11. De Pelsmacker, P., Muller, M., Viviers, W., Saayman, A. Cuyvers, L. and Jegers, M. (2005), "Competitive intelligence practices of South African and Belgian exporters", *Marketing Intelligence and Planning*, Vol. 23 No. 6, pp. 606-620.
12. Degaut, M. (2015), "Spies and Policymakers: Intelligence in the Information Age", *Intelligence and National Security*, available at: <http://dx.doi.org/10.1080/02684527.2015.1017931>, viewed on 19 August 2015.
13. Deng, Z. and Luo, L. (2010), "An exploratory discussion of new ways for competitive intelligence on Web2.0", *International Federation for Information Processing*, Vol. 252 No. 1, pp. 597–604.
14. Du Toit, A.S.A. and Sewdass, N. (2014). A comparison of competitive intelligence activities in Brazil, Malaysia, Morocco and South Africa. *Acta Commerci*, Vol. 14 No. 1, retrieved from: <http://dx.doi.org/10.4102/ac.v14i1.234>, viewed on 19 August 2015.
15. EAAB Annual Report 2008/2009. Retrieved from: http://www.eaab.org.za/article/annual_report_2008_/_2009, viewed on 16 July 2015.
16. EAAB Annual Report 2009/2010. Retrieved from: http://www.eaab.org.za/article/annual_report_2009_/_2010, viewed on 16 July 2015.
17. EAAB Annual Report 2010/2011. Retrieved from: http://www.eaab.org.za/article/annual_report_2010_/_2011, viewed on 16 July 2015.
18. EAAB Annual Report 2011/2012. Retrieved from: http://www.eaab.org.za/article/annual_report_2011/2012, viewed on 16 July 2015.
19. EAAB Annual Report 2012/2013. Retrieved from: http://www.eaab.org.za/article/annual_report_2012_2013, viewed on 16 July 2015.
20. EAAB Annual Report 2013/2014. Retrieved from: http://www.eaab.org.za/article/annual_report_2013/14, viewed 16 July 2015.
21. EAAB. 2014. Property contributes R191.4 billion to the national economy. Retrieved from: http://www.eaab.org.za/property_sector_charter_council, viewed on 16 July 2015.
22. Fatoki, O. (2014), "The Competitive intelligence activity of immigrant entrepreneurs in South Africa", *Journal of Social Science*, Vol. 38 No. 1, pp. 1-8.
23. Fatti, A. and Du Toit, A.S.A. (2013), "Competitive intelligence in the South African pharmaceutical industry", *Journal of Intelligence Studies in Business*, Vol. 1 No. 1, pp. 5-14.
24. Fleisher, C.S. (2004), "Competitive intelligence education: Competencies, sources, and trends", *Information Management Journal*, available at: <http://dx.doi.org/10.1108/03090560810877196>, viewed on 19 August 2015
25. Fleisher, C.S. and Wright, S. (2009), "Examining differences in competitive intelligence practice: China, Japan, and the West", *Thunderbird International Business Review*, Vol. 51 No. 3, pp. 249-261.
26. Garcia-Alsina, M., Ortoll, E. and Cobarsí-Morales, J. (2013), "Enabler and inhibitor factors influencing competitive intelligence practices", *Aslib Proceedings*, Vol. 65 No. 3, pp. 262-288.
27. Haddadi, A.E., Dousset, B. and Berrada, I. (2010), "Xplor Everywhere – The Competitive Intelligence System for Mobile", available at <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=andarnumber=5945635>, viewed 18 August 2015.
28. Haliso, H. and Aina, R.F. (2012), "Quality Collection of Library Resources in Meeting Users' Needs in Academic Institutions: Competitive Intelligence Approach", *Global Journal of Human Social Science*, Vol. 12 No. 12, pp. 25-31.
29. Heppes, D. and Du Toit, A. (2009), "Level of maturity of the competitive intelligence function: Case study of a retail bank in South Africa", *Aslib Proceedings: New Information Perspectives*, Vol. 61 No. 1, pp. 48-66.
30. Herring, J. P. (1999), "Key intelligence topics: a process to identify and define intelligence need", *Competitive Intelligence Review*, Vol. 10 No. 2, pp. 4-14.
31. Hesford, J.W. (2008), "An empirical investigation of accounting information use in competitive intelligence", *Journal of Competitive Intelligence and Management*, Vol. 4 No. 3, pp. 17-49.
32. Johns, P. and Van Doren, D.C. (2010), "Competitive intelligence in service marketing: A new approach with practical application", *Marketing Intelligence and Planning*, Vol. 28 No. 5, pp. 551-570.
33. Juhari, A.S. and Stephens, D. (2006), "Tracing the origins of competitive intelligence through history",

- Journal of Competitive Intelligence and Management, Vol. 3 No. 4, pp. 61-82.
34. Lin, S. and Yan-Zhang, W. (2015), "Identifying the Core Competitive Intelligence Based on Enterprise Strategic Factors", Journal of Shanghai Jiaotong University of Science, Vol. 20 No. 1, pp. 118-123.
 35. Liu, C. and Oppenheim, C. (2006), "Competitive intelligence and the development strategy of higher education in Tianjin, China", Information Development, Vol. 22 No. 1, pp. 58-63.
 36. Maune, A. (2014), "Competitive intelligence and firm competitiveness: an overview", Corporate Ownership and Control, Vol. 12 No. 1, pp. 29-42.
 37. McGonagle, J.J. and Vella, C.M. (2012), *Proactive Intelligence: what is Competitive Intelligence and Why Should You Care about it?* Springer-Verlag: London.
 38. Muller, M.L. (2006), "Parts of competitive intelligence: Competitor intelligence", South African Journal of Information Management, Vol. 8 No. 1, retrieved from : <http://www.sajim.co.za/index.php/SAJIM/article/viewFile/209/205>, viewed on 20 August 2015.
 39. Muller, M.L. (2007), "Competitive intelligence in business: Latin America", South African Journal of Information Management, Vol. 9 No. 2, retrieved from : <http://www.sajim.co.za/index.php/SAJIM/article/download/19/19>, viewed on 20 August 2015.
 40. Nasri, W. (2011), "Investigate Competitive Intelligence Process: An Exploratory Study in Tunisian Companies", International Business Research, Vol. 4 No. 4, pp. 62-73.
 41. Nasri, W. (2012), "Conceptual model of strategic benefits of competitive intelligence process", *International Journal of Business and Commerce*, Vol. 1 No. 6, pp. 25-35.
 42. Nasri, W. and Zarai, M. (2013), "Key success factors for developing competitive intelligence in organisation", American Journal of Business and Management, Vol. 2 No. 3, pp. 239-244.
 43. Nenzhelele, T.E. (2012), A study of the awareness and practice of competitive intelligence in SMEs in the City of Tshwane Metropolitan Municipality. Published dissertation, University of South Africa: South Africa.
 44. Pellissier, R. and Nenzhelele, T.E. (2013)b, "Towards a universal definition of competitive intelligence", South African Journal of Information Management, Vol. 15 No. 2, retrieved from: <http://dx.doi.org/10.4102/sajim.v15i2.559>, viewed on 19 August 2015.
 45. Pellissier, R. and Nenzhelele, T.E. (2013), "Towards a universal competitive intelligence process model", South African Journal of Information Management, Vol. 15 No. 2, retrieved from: <http://dx.doi.org/10.4102/sajim.v15i2.567>, viewed on 20 August 2015.
 46. Pinto, V.A. (2014), Supporting competitive intelligence with linked enterprise data. Published thesis, FUMEC University: Belo Horizonte.
 47. Pranjic, G. (2011), "Influence of business and competitive intelligence on making right business decisions", Business Review, Vol. 1 No. 1, pp. 271-288.
 48. Prescott, J.E. (1999). The evolution of competitive intelligence: designing a process for action. APMP Spring, 37-52, retrieved from: <http://files.paul-medley.webnode.com/200000023-97ce398c7e/Competitive%20Intelligence%20A-Z.pdf>, viewed on 19 August 2015.
 49. Roitner, A. (2008), Competitive intelligence in Austria: An empirical study. Published dissertation, University of Vienna: Austria.
 50. Sewdass, N. and Du Toit, A. (2014), "Current state of competitive intelligence in South Africa", International Journal of Information Management, Vol. 34 No. 1, pp. 185-190.
 51. Singh, R. and Vij, S. (2012), Are Ethics Important for Competitive Intelligence Professionals? Amity Competitive Intelligence Conference (ACIC-2012) on "Competitive Intelligence for Organizational Success", March 6, 2012, Amity University, Noida (India).
 52. Smith, J.R., Wright, S. and Pickton, D. (2010), "Competitive intelligence programmes for SMEs in France: Evidence of changing attitudes", Journal of Strategic Marketing, Vol. 18 No. 7, pp. 23-536.
 53. The Global Competitiveness Report 2014-2015. Retrieved from: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf, viewed on 16 July 2015.
 54. Weiss, A. and Naylor, E. (2010), "Competitive intelligence: How independent information professionals contributes to organisational success", American Society for Information Science and Technology, Vol. 37 No. 1, pp. 30-34.
 55. Wright, S., Bisson, C. and Duffy, A.P. (2012), "Applying a behavioural and operational diagnostic typology of competitive intelligence practice: empirical evidence from the SME sector in Turkey", Journal of Strategic Marketing, Vol. 20 No. 1, pp. 19-33.
 56. Yassine, F.L.Y.A. (2014), "The Level of Applying Competitive Intelligence as Perceived by Managers at Telecom Company "Zain" in Jordan", International Journal of Business and Social Science, Vol. 5 No. 1, pp. 22-34.

SMALL AND MEDIUM ENTERPRISE (SME) INTERNET MARKETING CHALLENGES IN THE TSHWANE AREA, SOUTH AFRICA

Louise van Scheers, Johan Botha*, Jacques van Scheers***

Abstract

The aim of this paper is to establish Internet marketing challenges of SMEs in the Tshwane area. It seems that the benefits of Internet marketing seem to be ignored by most SMEs however but unfortunately, Internet marketing challenges prevent SME owners from using these tools effectively. A survey study method of research design has been selected for the research. The sample for the study comprised 200 SMEs in the Tshwane area. Internet marketing usage in SMEs and the impact thereof is viewed as an essential part of modern day organisational operations for SMEs to promote their business both domestically and globally. 'Unauthorised access to sensitive or proprietary information and limited verification of authorship of messages' is mentioned as the largest challenges. The conducted research recommends that Internet marketing can be cost effective if the SMEs make use of their social networks and use best practises that enable them to get their adverts or posts shared across social networks. The conducted research also recommends that SMEs with limited resources start with social media and YouTube as a marketing tool, as the learning curve is low and cost involved almost nil. This paper conclude that Tshwane SMEs are using both Internet marketing and traditional marketing to promote their businesses.

Keywords: SME Social Media Activities, Internet Marketing, Tshwane Area, Benefits of Social Media

**Marketing & Retail Department, University of South Africa*

***Milpark Business School*

1 Introduction

Secondary studies conducted by Ceglie & Dini (2005) and UN (2012) indicate that research of SMEs in the past has mainly focused on the funding challenges of SMEs. According to current research is clear that SMEs Internet marketing research is needed as they often fail to utilise marketing tools available for Internet marketing purposes. The affordability and research indicates that the benefits of Internet marketing seem to be ignored by most SMEs. It seems that Internet marketing challenges prevent SME owners from using these tools effectively. A SME survey conducted in 2012 (World Wide Worx: 2012) shows that 410 000 SMEs in South Africa have a website, representing only 63% of active and formal SMEs. Secondary research conducted by Ceglie & Dini (2005) and UN (2012) shows that SMEs with a website are likely to be more profitable than those without. The question to be asked is then why do SMEs not use Internet marketing to market their businesses.

It seems that there is a gap in the literature and therefore this research aims to establish SMEs Internet marketing challenges of the Tshwane SMEs. The motivation to use the Tshwane area is because it is the largest metropolitan municipality in South Africa, the

third-largest city in the world after New York and Tokyo (Tshwane, 2013) and it is an economical hub in South Africa. Following this introduction, section two of the paper considered the review of literature, section three discussed the methodology of the paper, and section four presented the analysis, results and discussion while the last section dwelled on the conclusion and recommendations.

2 Literature review

2.1 SMEs in the Tshwane area

The Tshwane municipal area had an impoverished population of around 1,2 million in 2007 (Tshwane, 2013) which grew to 1,7 million in 2014. SMEs operate within a complex and dynamic business environment in the Tshwane area, according to Van Scheers (2009). According to Van Scheers (2009), the small business failure rate is particularly high in the Tshwane area. This is in line with results from the 2012 SME Index study where 6% of the South African SME respondents reported that their survival was threatened, followed by 11% who felt their survival was not threatened. According to the results of the study, South Africa has become less accommodating to small and medium-sized business with nearly three-

quarters of the respondents (74%) agreeing that running an SME had become more difficult. Nineteen per cent of the SME respondents in South Africa felt that conditions had not changed, while a little over 6% felt that it was easier to operate an SME (Fritsch & Schroeter, 2013).

It can be said with some certainty that running a growing successful SME in the Tshwane area has always been a challenge, but even more so in the current environment. In the following sections, Internet marketing challenges will be discussed as well as the part it plays in the SME sector.

2.2 Internet marketing

Online marketing, also referred to as online advertising, consists of activities using the Web or email to drive direct sales via electronic commerce, or creating sales leads from websites or email marketing (Dockel & Ligthelm, 2012). Internet marketing is a diverse area with many tools to bring customers to the SMEs' products and services. The main tools Internet marketers can use are:

- Search engine marketing (Google, Bing, Yahoo etc.)
- Directories and listings
- Email marketing
- Social media marketing
- Public relations
- Online advertising

2.3 Global SMEs Internet marketing usage

Internet marketing usage (Ching & Ellis, 2004; Hoffman, Novak & Chatterjee, 1995; Nguyen & Barrett, 2006) has grown rapidly in relation to the increase in commercial websites. Nguyen and Barrett (2006) observe that this increase of Internet usage has also impacted upon the barriers to export entry and has provided hope and opportunities to millions of SMEs attempting to enter foreign markets, by allowing them to communicate globally as efficiently as any large business. Egan, Santos & Bloom (2003) observe that there has been an increase of Internet use in corporate environments, but the extent to which it is used by SMEs outnumbered it. SME marketing differs to marketing in the larger organisations and corporations. It is perceived to be more intuitive, innovative, competency based, and operating under financial and human resource/time constraints while making effective use of networking (Carson, Gilmore, Perry & Gronhaug, 2001). The ability to serve niche markets and develop strong relationships with customers has always been a strong point of SMEs. These days they are less effective by internet-enabled businesses of any size (Gilmore, Gallagher & Henry, 2007). Kula and Tatoglu (2003) indicate that SMEs can use the Internet for marketing products and services by providing online quotes, advertising in more markets with less

marketing expense, and using email as a marketing tool to enlarge their reach to potential markets. This approach decreases the costs of printing materials such as catalogues and glossy brochures, and delivery mechanisms such as postal services or courier services. Downie (2012) and Poon and Swatman (2007) have identified motivation drivers such as the opportunity to promote their company better; the chance to lower operating and marketing costs; enrich their overall marketing communications mix and sales funnel effectiveness, and increase sales and profits for SMEs.

A recent study conducted by Friedlein (2014) in Britain shows that 79% of the SME respondents felt it was critical to their marketing to have a website to represent their brand and showcase their products or services. The same study also highlighted the following:

- SME managers and owners are familiar with social media marketing, email marketing and SEO.
- Over 50% manage their digital activities are operated in-house and one-third have some sort of agency support.
- The least familiar online marketing tactics are content marketing, affiliate marketing and inbound marketing.

Summarising the research study findings, Friedlein (2014:21), founder and managing director at Browser Media, remarked:

"It's heartening to find that SMEs understand that their website can be a valuable business asset but equally concerning that only half invest in promoting it more broadly. It's a bit like setting up a new retail outlet and then only telling family and friends how to find you. In order to attract new customers and grow their businesses, these SMEs need to think like a big brand and make more noise online."

2.4 SME Internet usage in South Africa

South Africa has one of the largest Internet economies in Africa. A report by Goldstuck (2012) shows that South Africa had approximately 8,5 million Internet users at the end of 2011. This represented a 25% increase over the 6,8 million recorded in 2010. This high growth rate is the result of the proliferation of 'Smartphones' in the South African market – making Internet available to more people without an ADSL or other physical connection. South African Internet penetration grew to approximately 17%. But it is by no means the biggest percentage of Internet penetration in the African continent. Nigeria, with its 45 million users, has a 29% penetration. Egypt has a user base of 21,6 million users with a 26% penetration, while Morocco's 15,6 million users represent a 49% penetration. Kenya has an estimated 10,4 million Internet users with a 25% penetration.

2.5 SME Internet marketing challenges

Several studies (Tan, Chong, Lin & Eze, 2010; MacGregor & Vrazalic 2005; Cavaye & van Akkeren, 2009) show that SMEs are not aware of the financial benefits that could result from using the Internet marketing. Challenges SMEs reported were that the start-up investment costs for Internet adoption were high, and that the return on investment was not clear. A second challenge mentioned is that SME owners did not believe that Internet adoption could result in lower operational costs. Singh, Garg and Deshmukh (2010) identified further challenges constraining SMEs' Internet usage for marketing and sales:

- Inadequate access and understanding of Internet technologies pertaining to web presence, marketing and sales channels,
- Ineffective Internet-related selling techniques, and
- Limited Internet market research.

Dholakia and Kshetri (2004); Johnson, Levine, Smith and Stone (2010:405–413); Poon and Swatman (2009), and Tan, *et al.* (2010) observe that a lack of managements' long-term vision on Internet marketing and sales opportunities results in inadequate support and encouragement to adopt Internet strategies. Resistance to facing a new learning curve (change) is another challenge to adoption of Internet and social media platforms, tools and strategies (Cavaye & van Akkeren, 1999; Johnson, *et al.* 2010; MacGregor & Vrazalic, 2005). Despite the high affordability of Internet networks, the low time-to-market factor and the low learning-curve in comparison to other Internet tools, it seems some SMEs are still not convinced of the value of the social media component. However, there is strong indication that more SME owners are starting to understand the value of Internet marketing in enhancing productivity and competitiveness (Bakeman & Hanson, 2012:107).

Perhaps the most important statistic to come out of the SME survey is that 63% of formal SMEs in South Africa have a website, which leaves more than a third of SMEs without an online presence (World Wide Worx, 2012). Next the methodology will be discussed.

3 Methodology

A survey research was designed and primary data were collected from SMEs in the city of Tshwane. The population of study was 200 SMEs in the city of Tshwane. In selecting the sample, simple random sampling techniques were adopted by using a list of registered SMEs from the Tshwane municipality. The questionnaire was developed based on existing literature and pretested with five small businesses to ensure clarity and comprehension, as well as to gauge average completion time. Minor revisions were made

in question wording and order as a result of the pretest. Because of careful monitoring, the total of 200 questionnaires were returned representing 100% response rate. To assess the internal consistency of the instrument, Cronbach's alpha was run and a reliability coefficient of 0.836 resulted. The instrument was validated through content validity. The instrument was structured and multi-chotomous in design covering demographic and research variable questions. Descriptive statistical analysis was employed to establish the SME Internet marketing challenges in the Tshwane area. The outcome of the determination was used to make decision.

4 Results, analysis and discussion

4.1 Characteristics of respondents

4.1.1 Gender of the Tshwane SME

Women are increasingly joining the work force, but because of child-rearing duties lack formal education and work experience. They are also too busy with family duties, therefore most SMEs are owned by males. The study confirms that almost two-thirds (64,5%) of the respondents were male. Only 35,5% of the respondents were women, which validates the secondary research conducted.

4.1.2 Education of the Tshwane SMEs

Education plays an important role in the success of an SME, as highlighted in the introduction. A multivariate analysis of comparing the education level of respondents and Internet usages are reflected in Table 1.

It seems that (Table 1) on average, educational level has an effect on how successful the respondents are to increase their sales, product awareness, consumer support and overall productivity through their Internet marketing communications. More specifically, the proportions of respondents that increase their sales, product awareness, consumer support and overall productivity by 40% or less, decrease as the level of education increases. The inverse is true for the respondents who increase their sales, product awareness, consumer support and overall productivity by more than 40%. In fact, none of the Grade 10 / Standard 8 respondents increased their sales, product awareness, consumer support and overall productivity by more than 40%.

4.1.3 Internet activities – frequency

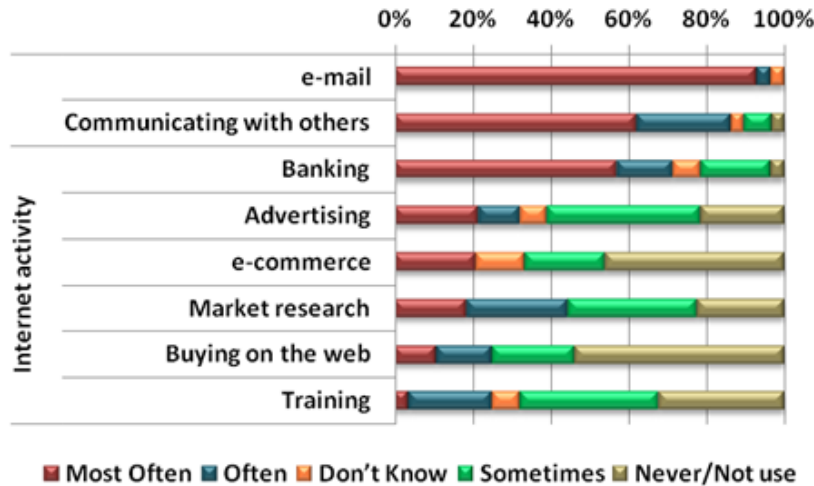
Question 11 inquiries into Internet activities, frequency and tools that Tshwane SMEs are using. The results are shown in Figure 2.

Table 1. Multivariate analysis of comparing the education level of respondents and internet usages

	Grade 10/ Standard 8	Matric	Degree & higher	Total
What is the estimated percentage (%) 40 % or less Increase in sales	2	6	10	18
	100.0%	75.0%	66.7%	72.0%
More than 40 %	0	2	5	7
	0.0%	25.0%	33.3%	28.0%
Total	2	8	15	25
What is the estimated percentage (%) 40 % or less Increase in product awareness	1	6	7	14
	100.0%	85.7%	53.8%	66.7%
More than 40 %	0	1	6	7
	0.0%	14.3%	46.2%	33.3%
Total	1	7	13	21
What is the estimated percentage (%) 40 % or less Increase in customer support	1	6	6	13
	100.0%	75.0%	50.0%	61.9%
More than 40 %	0	2	6	8
	0.0%	25.0%	50.0%	38.1%
Total	1	8	12	21
What is the estimated percentage (%) 40 % or less Increase overall productivity of SME	1	5	6	12
	100.0%	62.5%	50.0%	57.1%
More than 40 %	0	3	6	9
	0.0%	37.5%	50.0%	42.9%
Total	1	8	12	21

Source: Question 10 of field report

Figure 1. Internet activities, frequency and tools



Source: Question 11 of field report

It is clear from Figure 1 that email is the activity most often used by almost all (92.9%, n=26) respondents, followed by communicating with others (62.1%, n=18) and banking (57.1%, n=16). Email is also the one activity for which none of the respondents reported that they never, or even sometimes, use. Although some respondents also engage in all the other activities most often, the proportions of those who do vary from 3,6% (n=1) for training to 21,4% (n=6) for advertising. The proportions of respondents who appear not to know enough of the Internet to know what they are doing are small, while for market research and buying on the web, nobody reported that they did not know. Buying on the web (53,6%, n=15)

and e-commerce (45,8%, n=11) are the activities for which the largest proportions of respondents reported that they never engage in them.

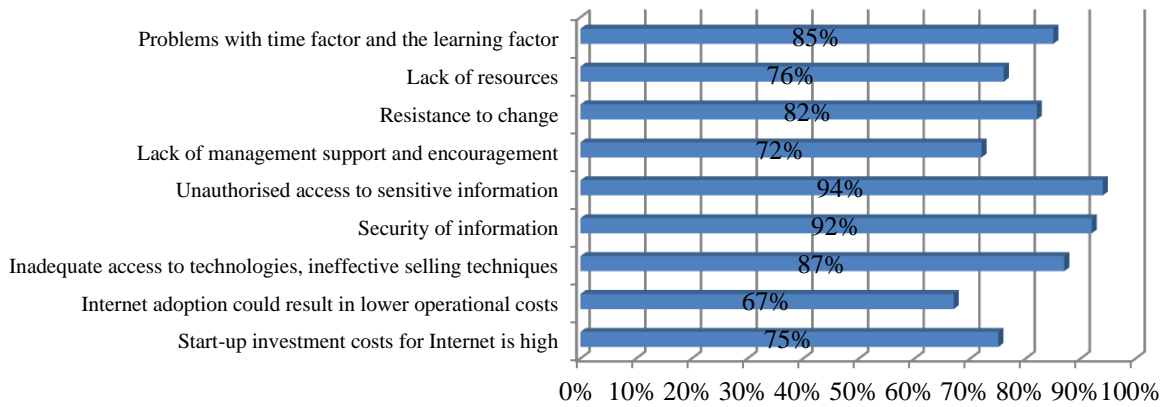
In both the Kolmogorov-Smirnov and the Shapiro-Wilk tests, the null hypothesis the distribution of the internet activity index conforms to a normal distribution. With the p-value (sig.) > .05, the null hypothesis cannot be rejected.

4.2 Internet marketing challenges for SMEs

Question 30 the field report asked the respondents to indicate the challenges they experience with using

Internet marketing. In the literature section, the SME social media challenges were described and the results of the Tshwane SME challenges are illustrated below in Figure 2.

Figure 2. Challenges for SMEs to use Internet marketing



Source: Question 30 of field report

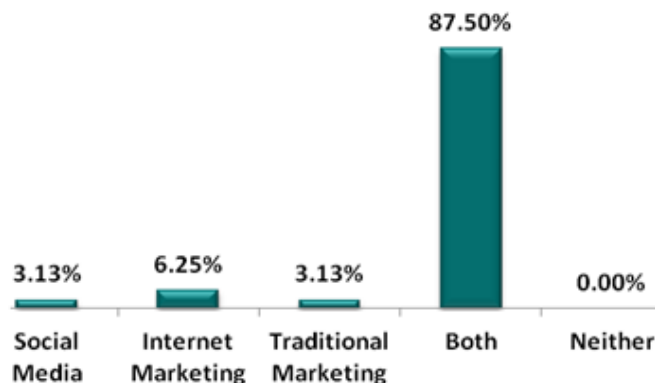
Figure 2 indicates that 94% of the respondents remarked that they consider ‘Unauthorised access to sensitive or proprietary information, and limited verification of authorship of messages’ as the largest challenge to using Internet marketing. This confirms that the Tshwane SME also experience the same challenges as indicated in the literature review. Figure 3 also shows that most respondents (92%) have problems with ‘security of information’; 87% of the respondents experienced inadequate access to technologies, ineffective selling techniques, and limited market research whereas 85% of the respondents mentioned that time and cost are challenges to using social media and Internet marketing. Figures for lack of resources (76%) and start-up investment costs (75%) point out that Tshwane SMEs also have challenges with funds. Of the respondents, 67% indicated that they are still not

convinced that Internet adoption could result in lower operational costs, while resistance to change as reason not to use Internet marketing was giving by 82% of the respondents. Lack of management support and encouragement were challenges mentioned by 72% of the respondents.

4.3 Internet marketing or traditional marketing, or both

The question was asked: Do you prefer internet marketing or traditional marketing, or both? The literature section shows that most SMEs use internet marketing and traditional marketing. This question was asked to establish whether Tshwane SMEs prefer Internet marketing or traditional marketing, or both. The results are indicated in Figure 3.

Figure 3. Internet marketing or traditional marketing, or both



Source: Question 28 of field study

Figure 3 shows that 87,50% of the respondents tend to favour both internet and traditional marketing. In the literature section it was mentioned that most SMEs use both Internet marketing and traditional

marketing to promote their businesses and this confirms that the Tshwane SMEs use the same reasoning as other SMEs.

5 Conclusion and recommendations

Based on the analysis and the findings thereof, this paper concludes that 94% of the respondents remarked that they consider 'Unauthorised access to sensitive or proprietary information, and limited verification of authorship of messages' as the largest challenge to using Internet marketing. This confirms that the Tshwane SMEs also experience the same challenges as indicated in the literature review section. Most respondents have problems with 'security of information'. The results confirm that 87% of the respondents experienced inadequate access to technologies, ineffective selling techniques, and limited market research, whereas 85% of the respondents mentioned that time and cost are challenges in using social media and Internet marketing. Figures for lack of resources (76%) and start-up investment costs (75%) point out that Tshwane SMEs also have challenges with funds.

Of the respondents, 67% indicated that they are still not convinced that Internet adoption could result in lower operational costs while resistance to change as reason not to use Internet marketing was given by 82% of the respondents. Lack of management support and encouragement were challenges mentioned by 72% of the respondents. The research shows 87% of respondents' referred to time and costs as challenges in using social media and Internet marketing.

The majority of the respondents of the Tshwane community reported that they do use Internet marketing for their businesses. The conducted results reflect that LinkedIn is the website known to the largest proportion (89,7%) of respondents, followed by Facebook, Twitter, Google+ and YouTube, with all of them known to more than 70% of the respondents. Digg is the social website that is known by the least number (6,9%) of respondents.

The conducted research recommends that Tshwane SME owners utilise YouTube channels to educate and train themselves on effective usage of Internet marketing instruments, specifically the marketing use of Facebook and YouTube, especially if they use social media for promoting their services and their products. Internet advertising instruments can be utilised effectively for marketing and customer interaction without spending large amounts of resources. Although, it seems that SMEs are using Internet marketing but most SMEs confirmed that they rely on both Internet marketing and traditional marketing methods to promote their businesses.

References

1. Accenture. 2003. eGovernment leadership: Engaging the customer. Accenture report. [Online]. Available from: http://nstore.accenture.com/acn_com/PDF/Engaging_the_Customer.pdf. [Accessed: 2014-02-23].
2. Ary, D., Jacobs, L.C., Sorensen, C.K. & Walker, D. 2013. Introduction to research in education. 9th ed. Belmont: Cengage Learning.

3. Babbie, E.R. & Rubin, A. 2013. Research methods for social work. 8th ed. Belmont: Cengage Learning.
4. Bakeman, M.M. & Hanson, L. 2012. Bringing social media to small business: A role for employees and students in technology diffusion. *Business Education Innovation Journal*, 4(2):106.
5. Bowler, A., Dawood, M.S. & Page, S. 2007. *Entrepreneurship and small business management*. Pretoria: Juta.
6. Bryman, A. 2011. *Social research methods*. Oxford: Oxford University Press.
7. Bryman, A. & Bell, E. 2011. *Business research methods*. Oxford: Oxford University Press.
8. Dockel, J. A. & Ligthelm, A. A. 2012. *Factors that contribute to small business survival*. Pretoria: Unisa.
9. Lunsche, E. & Barron, M. 2010. *Marketing Management*. In Kotler, P. & Armstrong, G: *Marketing: An introduction*. London: Pearson Prentice-Hall.
10. Murphy, M. 2006. *Small business management*. London: Financial Times and Pitman Publishing.
11. Lacho, K. J. & Marinello, C. 2010. Overcoming social media barriers to small business. *The Entrepreneurial Executive*, 15:127–133. [Online]. Available from: http://issuu.com/hofstra/docs/hofhrz_spring13/7 [Accessed: 2014-09-01].
12. South Africa. 1996. National Small Business Act no. 102 of 1996. Pretoria: Government Printer.
13. Strydom, J. W. 2013. Retail patronage of Sowetan consumers after 1994. *African Journal of Business Management*, 7(29): 2863–2871. [Online]. Available from: http://www.academicjournals.org/article/article1380631730_Strydom.pdf. [Accessed: 2014-02-14].
14. Tan, K., Chong, S.C., Lin, B. & Eze, U. C. 2010. Internet-based ICT adoption among SMEs demographic versus benefits, barriers, and adoption intention. *Journal of Enterprise Information Management*, 23(1):27–55.
15. Tan, M. & Teo, T.S.H. 2000. Factors influencing the adaptation of Internet banking. *Journal of the AIS*, 1(1). [Online]. Available from: <http://dl.acm.org/citation.cfm?id=374134>. [Accessed: 2014-05-12].
16. Theunissen, S. 2012. *Social Media: Unlocking new opportunities for SMEs*. Property Points South Africa. [Online]. Available from: <https://propertypointsouthafrica.wordpress.com/2012/08/29/social-media-unlocking-new-opportunities-for-smes/#more-68>. [Accessed: 2014-04-12].
17. Tshwane. 2013: 1–101. Sandspruit works association. Annual report 2013–2014 http://www.tshwane.gov.za/sites/about_tshwane/CityManagement/Office%20Of%20The%20City%20Manager/Pages/Annual-Report-2013-14.aspx. [Accessed: 2014-03-12].
18. Van Scheers, L. 2011. SME marketing skills challenges in South Africa. *African Journal of Business Management*, 2011-07.
19. Witzig, L., Spencer, M. & Galvin, D. 2012b. A profile of social media use by fortune 500 and Inc. 500 corporations. in www.actacommerci.co.za/index. [Accessed: 2014-02-02].
20. World Wide Worx. 2012. Broadband in SA doubles in two years. [Online]. Available from: <http://www.worldwideworx.com/broadband201/>. [Accessed: 2014-02-02].

THE POTENTIAL FOR REDUCING YOUTH UNEMPLOYMENT THROUGH INFORMAL BUSINESS DEVELOPMENT IN THE ETHEKWINI MUNICIPALITY, KWAZULU-NATAL PROVINCE, SOUTH AFRICA

Pfano Mashau, Jennifer Houghton**

Abstract

Youth unemployment is a problem that requires different diagnoses from different stakeholders, and informal business is important for local economic development. However, the youth are not much involved in the informal sector. Youth involvement in the informal sector will help address youth unemployment. This article aims to evaluate the impact of informal business development on reducing youth unemployment in the eThekweni Municipality, KwaZulu-Natal Province, South Africa. Through in-depth interviews with eThekweni Municipality officials, business support organisations and unemployed youth, assessment of supporting documents and site visits, enough data were collected to support the notion that informal business development can work to address unemployment in the municipality. The findings showed that the informal economy does not have a significant impact on completely mitigating the unemployment problem in the municipality. However, the sector is very important for economic growth and development, as well as job creation, which will begin to alleviate the unemployment problem. Thus both the formal and informal sectors of the economy need to be examined as potentially providing the first steps to achieving the long-term employment goals for the eThekweni Municipality.

Keywords: Unemployment, Youth Unemployment, Labour Market, Entrepreneurship, Informal Economy, Informal Business Development

**University of KwaZulu-Natal, Graduate School of Business and Leadership, University Road, Westville Durban, South Africa*

1 Introduction

The recent global economic crisis has worsened unemployment, the implications of which are starting to negatively affect both young people and society as a whole (Leach 2013; Gratton 2013). With less experience and fewer skills than many adults, young people often encounter difficulties accessing work and are therefore vulnerable to unemployment – particularly in a troubled economy.

In South Africa, the youth unemployment rate is approximately 51%, which is double the overall national unemployment level (StatsSA 2012). The high levels of youth unemployment are reflected in local municipalities all over the country. Like any other municipality in South Africa, the eThekweni Municipality in KwaZulu-Natal Province has youth as the largest proportion of the unemployed. In fact, the Municipality has youth unemployment levels higher than the national youth unemployment rate (eThekweni Municipality 2013; StatsSA 2012). Addressing youth unemployment is therefore a critical concern. In this regard, there is minimal research on how informal business development addresses youth

unemployment. This study was thus conducted to examine how improved support for small-scale businesses and informal businesses can eventually increase the labour market and/or create youth employment in the eThekweni Municipality.

2 Literature review

2.1 Understanding unemployment in eThekweni Municipality

There are three different types of unemployment: frictional unemployment, cyclical unemployment and structural unemployment (Mohr 2010). Among the structurally unemployed are the youth. In South Africa, the youth are defined as people aged 15–34 years (StatsSA 2012). In this group are included ‘teenagers’ and ‘young adults’ (Grigoryeva 2012; Hammer and Hyggen 2010). ‘Youth unemployment’ refers to people in this age group who cannot find a job or who are looking for a job (Mizuno et al. 2006). The diversity of this group makes it very difficult to address the employment challenges that young people are currently faced with.

According to Ryan (2001), to understand the main causes of youth unemployment requires analysis at different levels – i.e. looking firstly at the characteristics of youth labour markets and the young population as a whole, and secondly at the behavioural and demographic traits of individuals that might have an influence on their opportunities in the world of work. The high level of youth unemployment suggests that the demand for youth in workplaces is low (Ryan 2001). The first level of analysis examines the following determinants of youth unemployment: aggregate demand, youth wages, size of the youth labour force, and lack of skills. Mthembu (2005) states that young people are earning low salaries that cannot cover their basic needs and that low salaries demotivate young people and cause many of them to join the economically inactive population. The second focus of analysis concentrates on regional disproportion, age categories (e.g. teenagers versus young adults), gender, ethnic determinants, and educational attainments (Ryan 2001). Unemployment is not evenly spread, although the vulnerable groups will vary according to different conditions and circumstances – for example, many young women are unemployed (Du Toit, 2003; Ryan, 2001).

In South Africa, as with other countries, the youth employment challenge cannot be resolved by a single employment policy (Filmer and Fox, 2014, Williams and Lansky, 2013, Nkechi et al., 2012; Dewar, 2005). A problem of this magnitude requires a combination of interventions which are likely to offer the greatest potential for young people to gain decent work opportunities. However, in South Africa there are several other important policy areas that require serious consideration, including economic growth and improvements in education. For example, if the country's education standard improves, more knowledgeable and employable youth whose skills are more likely to match market place demands – will be produced (Mthembu 2005).

2.2 Entrepreneurship: a pathway to local economic development

According to Mohr (2010, 9), 'the availability of natural resources, labour and capital is not sufficient to ensure economic success'. There is a need for people who combine and organise these factors of production – individuals who are referred to as entrepreneurs (Mohr 2010). Entrepreneurs are the driving force behind production therefore Mohr (2010) asserts that entrepreneurship is an important economic force. Where entrepreneurship is lacking, the government is sometimes forced to play the role of an entrepreneur in an attempt to stimulate economic development (Mohr 2010). Furthermore, it is argued that the fastest way to create employment is through entrepreneurship (Zack-Williams et al. 2002).

A study on entrepreneurship and development in poor countries by Naudé (2011) showed that it is an

important determinant of economic growth and development. The role of institutions is to support and strengthen entrepreneurs; the aim is to be able to determine economic growth and development. Therefore, entrepreneurship may be regarded as a tool that enables institutional goals (the institution being government and more specifically local government). Academics studying entrepreneurship still have shortfalls, however, to convincingly show how institutions shape development outcomes. Naudé (2011) further emphasises the importance of institutions in promoting entrepreneurship and explains the factors that complicate the understanding of the role of the institution in this regard. Institutional entrepreneurs are innovative and therefore the ability to expand business ventures helps destroy the prevailing non-market institutions in order for business to be successful (Naudé 2011). Institutional entrepreneurs start a business and their successes derive from internal and external factors.

Szabo and Herman (2012) view entrepreneurship as a micro driver of innovation and economic growth, and entrepreneurial activities are greatly motivated by innovation, productivity growth, competitiveness, economic growth and job creation. Szabo and Herman (2012) indicated the effect of entrepreneurship and innovation on economic development – which differs according to the development stages of a country. Advancement in developing countries is more visible than in developed countries. Szabo and Herman (2012) state that increasing competitiveness in less developed countries can be achieved by adopting existing technologies or making incremental improvements in other areas, but in the countries that have reached the innovation stage of development this is no longer sufficient for increasing productivity. Government policy in the areas of science, education, intellectual property and entrepreneurship can be instrumental in fostering the competitive market economy (Szabo and Herman 2012). Local economic development in South Africa is seen as one of the best ways to reduce structural problems like unemployment, poverty and inequality (Rogerson 2008).

Local economic development includes sets of initiatives designed to promote growing local economies and to address poverty alleviation. After widespread acceptance of local economic development, Nel and Rogerson (2005) stated that local economic development support is firmly on the agenda of many governments and key international agencies. Governments have to play a leading role in supporting the development of local economies and have come to increasingly support the fostering of entrepreneurship.

The new ventures that entrepreneurs establish have some value in communities, and Wickham (2001, 35) argues that entrepreneurship is 'bringing change and making a difference'. Entrepreneurs bring opportunities and growth in communities in the form

of encouragement – complementary to new innovation and competition (Wickham 2001). Entrepreneurs are highly appreciated for their ability to acquire and utilise resources in the best way possible. Hall et al. (2010) showed that society and the government are entrepreneurs' best source of resources. Entrepreneurs operate within a wider society; according to Rwigema (2008), they provide society with new products and access to new services, and also provide fellow citizens with jobs, help make the economic system competitive, and bring knowledge to society. Therefore, in developing local economies, entrepreneurs must operate with some degree of social responsibility (Rwigema 2008).

2.3 The contribution of self-employment

The employment level in an economy will increase if there are employers – which implies an increase in the development of business and/or business start-ups through which employers can create job opportunities. To this end, Thurik et al. (2008) investigated the dynamic relationship between self-employment and unemployment. They noted that entrepreneurship has become increasingly important to developed and developing countries as a source of economic growth and employment creation. According to Thurik et al. (2008, 5), 'Linking unemployment to self-employment, individuals confronted with unemployment and low prospects for wage-employment will turn to self-employment as a viable alternative'. This argument indicates that increasing unemployment leads to increasing start-up activities. However, one cannot conclude that high unemployment is correlated with high entrepreneurial activities. Chang (2011) argues that poor countries are more entrepreneurial than rich countries; however, Thurik et al. (2008) argue that unemployed people are not more entrepreneurial. Firstly, 'the unemployed tend to possess lower endowments of the human capital and entrepreneurial talent needed to start and sustain a new firm, and high unemployment may be associated with a low degree of self-employment' (Thurik et al. 2008, 674). Secondly, high unemployment rates may also imply lower levels of personal wealth, which also reduces the likelihood of becoming self-employed. Lastly, high unemployment rates may correlate with stagnant economic growth – leading to fewer entrepreneurial opportunities.

According to Burke et al. (2008), most entrepreneurs actually spend some of their careers in wage work. Hence it is possible to distinguish between entrepreneurial types (individuals who either have been self-employed or, if not, would consider self-employment as a career option) and entrepreneurial persistence, including 'die-hard' entrepreneurs who have never been engaged in wage work (Burke et al. 2008). The most successful entrepreneurs were at some stage wage workers (Burke et al. 2008). Entrepreneurs in both the formal and informal sectors

of the economy share the same entrepreneurial qualities, but the distinction between the two is the level of risk they face such as investment and access to the ? target market (Maloney 2003). It is important to note though that not everyone who is self-employed is an entrepreneur. Some people in the informal sector are self-employed because they are continuing where their relatives left off and they did not have to bear any entrepreneurial risks to become self-employed. Nevertheless, those who are self-employed with an enterprise (formal and informal) are potentially job creators (Parker 2004). However, a minority of self-employed people hire other workers (Román et al., 2013; Parker, 2004). This is often due to the nature of work, which can be solo rather than team-based (Parker 2004). Furthermore, high wage rates, government employment protection and the fact that some entrepreneurs seem to be intrinsically disinterested in growing their businesses – result in few self-employed people employing others (Parker 2004).

Entrepreneurs are eventually employers on a small or large scale, depending on the scale of business an entrepreneur runs. Normally, informal entrepreneurs are small-scale employers and formal entrepreneurs are most likely to be larger scale entrepreneurs. Entrepreneurship success is skewed towards entrepreneurs who were once engaged in wage work. As in the formal sector, starting a business in the informal economy requires an entrepreneur to identify opportunities and explore them.

2.4 Developing businesses in the informal economy

Authorities should focus on promoting and supporting small businesses that have growing potential instead of focusing on small business in general. Knowing how significant the informal sector is and accepting that there are many debates and conflicts linked to the informal economy, the support groups and local government need to intervene to improve the link between the two parts of the economy (formal and informal) and to address problems associated with the informal sector (Lund and Skinner 2004). According to Lund and Skinner (2004), local government in post-apartheid South Africa has a mandate to play an active role in economic development, as well as in promoting participation by the public. This mandate extends to the informal economy arena.

In the early 2000s, South African policymakers had a special focus on the informal economy, and it was investigated with a special focus on the regulatory environment (taxes and laws), institutions, services (training, financial services and insurance, access to markets), and access to infrastructure and protection from crime (Lund and Skinner 2003). Cities responded to the growth of informal work and were proactive in seeking out ways to creatively support informal enterprises (Lund and Skinner 2003).

However, the policymakers need to have structured strategies to support business development – to maintain the standard of the informal business environment.

According to Ligthelm (2008), many entrepreneurs setting up businesses in the informal economy of South Africa have little business acumen and most informal businesses operate as survivalist entities with limited development and growth potential. This is a result of not having many entrepreneurs in the informal economy with capabilities to expand and develop their businesses. Policymakers therefore have to formulate policies to make an environment more hospitable to informal business with growth potential (Ligthelm 2008). According to Ligthelm (2008, 3) promoting the entrepreneurial spirit in a country is widely accepted as the key to economic growth, job creation and improved competitiveness. To have positive developments in the informal economy, the barriers that make the informal economy a marginalised sector – need to be reduced.

Furthermore, Rogerson (2004) argues that local government should support and create a healthy climate for small businesses, since many studies show that small businesses in the formal and informal sector need local government support (Nel and Rogerson 2005; Rogerson 1999; Skinner 2000; Bruwer 2012; Rogerson 2008; Rogerson 2004; Taylor 2004). Therefore government has a major responsibility for creating local economies in which small businesses can grow – especially small businesses in the informal sector which are the most vulnerable form of business. Corradi (2012) states that small businesses that expand are the ones that are led by entrepreneurs with access to resources. Development in the informal sector is thus reinforced by bridging social capital, through which new information, ideas and resources circulate (Corradi 2012). According to Corradi (2012), part of these exchanges may become formalised in business partnerships in the medium and long run, so bonding ties between the actors involved (government, businesses and interest group) are a significant requirement.

The role of local government is typically the support of small businesses in both sectors. Municipalities have acknowledged that urban growth is complemented by informal economy work, and thus they are supporting the sector with infrastructure and protection (Patunru et al., 2009). Informal businesses don't only have to be survivalist because the informal economy goes beyond survivalist business. Therefore a municipality should work on increasing interaction between small businesses with the potential to grow with resourceful actors rather than simply addressing survivalism.

2.5 Involving young entrepreneurs in the informal economy

The youth do not find the informal sector desirable. The formal sector largely constitutes small scale business and employed elderly people. The study reviewed the age groups that are largely represented in the informal economy and the youth are not participating as much as they should in related economic activities, especially considering the high level of youth unemployment (Boeri and Van Ours, 2013).

Managing a small informal business is not easy as the owner has to do all the management and administrative tasks as well as the work of the business. This, however, can be a very good practice and is likely to enable a business owner to grow their own business and increase knowledge without going through formal training. By the time a business grows and moves to the formal sector, the entrepreneur will have learned all the basics of the business without formal training.

According to Dobson and Skinner (2009) and Skinner (2005), Durban's informal economy is largely populated by older people. Dobson and Skinner (2009) stated that over half of the people engaged in informal economic activities are woman over the age of 35. This shows that many young people do not think of the informal economy as a sector in which they can start up their businesses. Young entrepreneurs are faced by many challenges. The barriers that threaten the youth include young entrepreneurs being unable to access critical business information, limited access to funding, and limited/no business experience (Bosch and Esteban-Pretel 2012). Further challenges are a lower standard of education (some without any education), lack of entrepreneurial qualities, low confidence levels about success in the business environment, and insufficient knowledge and required skills to run a successful business (Jones 2013; Gratton 2013; Webb et al. 2012).

Faced with such potential challenges, the kind of business a young entrepreneur can start at a minimal cost and/or loss – is a small informal business. Informal small businesses have minimal risks because they do not require excessive investment like a formal business (Taylor 2004). For a young entrepreneur to avoid all the potential challenges that a formal business faces, government and support groups should encourage young entrepreneurs to avoid formality barriers by starting small and informal businesses (Boateng et al., 2014).

Local government interventions that target the informal economy have largely focused on street traders (Skinner 2003). Most policies do not focus on how to help small informal business to move out of the informal economy or help informal businesses to grow. Dewar (2005) questions the need for policies to regulate the informal economy. He argues that if the scale of activity is small there is no need for policy,

but if the scale of activity is large there is such a need. For the informal economy to be attractive to young people, working conditions and informal business support has to be improved. South African NGOs play a role in motivating and protecting informal businesses by representing their interests and ensuring that small informal businesses get a location with targeted customers (Dewar 2005).

3 Research methodology

This study adopts a qualitative approach. In-depth, face-to-face interviews were conducted with a purposive sample of eThekweni Municipality officials, business support organisations and unemployed youth in the area. Using purposive sampling, 13 interviewees were selected and interviewed. To increase the reliability of the research results, further data were extracted from policy documents and economic indicator documents such as the Youth Development Policy (Presidency 2012) and the eThekweni Informal Economy Policy (eThekweni Municipality 2001). The data analysis method adopted was a qualitative content analysis.

4 Results: reducing youth unemployment in eThekweni Municipality through the informal economy

This section presents the study findings. The municipality has initiatives in place to address youth unemployment, although the focus is mostly on formal business development. This study evaluates how eThekweni Municipality addresses youth unemployment through informal business development.

The unemployment level in eThekweni Municipality has been high for years, with an unemployment rate of 20.6% (eThekweni Municipality 2013). The municipality plans to address developmental challenges, mainly by focusing on employment creation strategies (eThekweni Municipality 2012, 2013). A large proportion of unemployed people in the municipality have been unemployed for more than one year (eThekweni Municipality 2013), with statistics showing that people who have been unemployed for more than a year make up approximately 56% of unemployed people in the area (eThekweni Municipality 2013). This confirms that the municipality has a structural unemployment problem. Interviewees from the business support unit in the municipality agree that unemployment levels are high compared to those in other countries. Three interviewees argued that unemployment is even higher than official statistics when not using the strict unemployment measure. Interviewees were further aware that the unemployment problem needed to be addressed and that additional intervention was needed.

4.1 Interventions to address unemployment

To fully address youth unemployment the municipality has to make both labour market demand-side interventions and supply-side interventions. One intervention that a labour market researcher believed needed more consideration is dealing with the youth themselves. Four interviewees argued that the public cannot fully blame the government for 'youth sloppiness', and that the youth should to some degree strive to build their own careers. One interviewee argued that the youth have become 'arrogant in their expectations'. To this end, Karumbidza (2013) states that the youth have to change their attitude towards work, and consider employment in the informal sector as a real option. Interviewees from the municipal business support unit argued that the youth should appreciate every little opportunity they get to 'gain life and working experience'. The youth should indeed seek profit-making opportunities, but earnings in the informal economy are low as a result of the homogeneity of activities and entrepreneurs' attitudes towards growing their enterprises, and this may be discouraging marginalised young people (Williams 2007; Chukuezi 2010).

Other supply-side interventions that might help reduce the level of youth unemployment were suggested in an interview with a municipal labour market researcher – namely life skills and work skills education – as these may help make the youth understand the value of employment (Karumbidza 2013). This was also supported by some interviewees who suggested that youth unemployment cannot be fully solved by formal education, especially as the municipality has many youth with minimal education. A consultant in a youth development agency argued that not everyone can be educated, but that the uneducated can still run businesses and become successful.

Studies do however show that increasing participation in education and training will also benefit the economy more widely through increased productivity and long-term economic growth (Adrian 2011; Wilson et al. 2011; Craddock 2012). Many argue that government should invest in education and training to try to create a pool of labourers who are employable and who can be employers (Essop and Derek 2008; Chukuezi 2010). Thus the municipality should not discount the value of formal education but should value training those who are formally uneducated. Furthermore, the demand-side solutions to unemployment also need some intervention, in order for training programmes and education to work.

The study does not negate the use of formal interventions but suggests that supporting entrepreneurship in the informal economy can assist address youth unemployment. Entrepreneurship is about standing by yourself and taking the initiative to start a business – irrespective of the sector. It is

considered that entrepreneurship in the informal sector is an important step towards addressing youth unemployment in eThekweni municipality.

4.2 Entrepreneurship as an answer to the youth unemployment problem

Entrepreneurship is a starting point for economic development (Jones 2013), so while producing successful entrepreneurs will not fully provide an answer to the unemployment problem, it will contribute to the development of the economy as a whole. A policy and advocacy researcher argued that the country has been experiencing jobless growth, but that entrepreneurs' success can result in employment creation and this should be encouraged. Furthermore, two interviewees argued that successful entrepreneurs will eventually become employers and in the local community can become a source of inspiration, information and knowledge. This promotes an overall positive 'climate' – which encourages further economic development.

The eThekweni Municipality has a unit which is tasked with business support, including informal economy management. This is the Business Support, Markets and Durban Tourism Unit (BSMDTU), which works with various interest groups that help with informal economy management. According to three interviewees from BSMDTU, the municipality has various programmes that were set up to support informal businesses. These include programmes to train informal traders by providing and supporting business support centres and business-development programmes. The deputy head of BSMDTU stated that these programmes enable small-scale businesses to access international markets and facilitated small business growth. BSMDTU believes that success in entrepreneurship results in more employers and is a positive step towards local economic development in the municipality. This is accomplished through complementary programmes and projects to support entrepreneurs and to enable access to international markets. Business participation is not as easy – the youth must also be ready and willing to run small businesses that are subjected to a potentially high level of failure.

4.3 The challenge of business participation in addressing youth unemployment

The Youth Development Policy is a framework that outlines government plans for addressing youth development challenges – which include unemployment and a lack of education and training (Presidency 2012; eThekweni Municipality 2007). To address these challenges the municipality has to work with businesses because they are the employers in the city.

Four interviewees mentioned that it can benefit the city to have big businesses participating in addressing youth unemployment. The role of government is arguably to intervene in the labour market to regulate the behaviour of the labour market players – to link businesses to each other (Lund and Skinner 2003; Bosch and Esteban-Pretel 2012; Corradi 2012; Ligthelm 2008). Corradi (2012) stated that intervention can be in the form of linking entrepreneurs with resourceful actors and collective entrepreneurship.

For many years, South Africans believed that formal education was the answer to the unemployment problem, according to the deputy head of BSMDTU. This resulted in large investments in education but limited investments into artisanal and other training for people with no formal education. Some interviewees further argued that more than enough focus is being given to formal education and that the value of informal education and training is being undermined. An eThekweni Municipality labour market researcher argued that the government focuses on formal education because it has been restoring the balance in the country's education system. Interviewees asserted that this imbalance was caused by apartheid. However, there are currently many educated South Africans who cannot be absorbed by the labour market and formal education is not adequately providing a solution.

Big businesses in the municipality will result in knowledge spill overs, and this supports the role of local successful business in addressing youth unemployment. This involvement could take the form of mentorship. Since existing businesses are employers, it is recommended that the municipality should allow big business to work with young entrepreneurs. This will potentially act as a form of training for young entrepreneurs which could build competencies for longer term use in small businesses.

4.4 The informal economy is more than street traders

The eThekweni Municipality informal economy policy recommends that business opportunities be developed and properly planned to deliver on the strategic focus of the IDP, which is to create jobs (eThekweni Municipality 2001, 2013). The IDP also states that the informal economy plays a significant role in addressing some of the challenges in the IDP – such as poverty, unemployment and lack of skills (eThekweni Municipality 2012).

Entrepreneurs setting up businesses in South Africa's informal economy have little business acumen and most informal businesses operate as survivalist entities with limited development and growth potential (Ligthelm 2008). Rogerson (2004) and Taylor (2004) state that local government should support and create a healthy climate for small businesses. Entrepreneurship and small business

development is widely accepted as the key to economic growth, job creation and improved competitiveness (Bianchi and Henrekson 2005; Burke et al. 2008; Naudé 2011; Parker 2004; Szabo and Herman 2012; Williams 2007; Taylor 2004). Therefore this calls for stronger and more effective government support for small-scale businesses. An advocacy and policy researcher in the municipality argued that for the informal economy to have growing small businesses, it has to be properly managed to avoid selling goods that are not good for customers, improper marketing, the invasion of public property, fights and unlawful actions.

According to the first quarter employment statistics in the informal economy for the year 2013, the municipality had a good management plan, but further good management is needed to increase business success. There is a need for better management of the informal economy to stimulate employment in this sector. There is more to the informal economy than just street trading (Essop and Derek 2008; Skinner 2000; Skinner 2005), and therefore the municipality has a role to play in informing the youth about the business opportunities in the informal economy. Three interviewees said they understood what the informal economy encompasses and that great focus is given to the more visible sector.

Entrepreneurship is a local economic development strategy in itself (Bruwer 2012; Chang 2011; Hall et al. 2010; Lund and Skinner 2003; Nel and Rogerson 2005; Rogerson 1999; Rogerson 2004; SALGA 2012; Szabo and Herman 2012; Wickham 2001). Many people support entrepreneurship as the way to develop local economies, for example the informal economy researcher mentioned that many women are joining Durban's informal economy because the entrepreneurial activities have improved the lives of many people.

The interviewees also thought that entrepreneurship provides a large part of the answer to the youth unemployment problem. The structural youth unemployment problem is a complex matter to resolve. However, the encouragement of informal business start-ups could provide some parts of the answer to the problem. Informal business development can add to the ways in which the eThekweni Municipality is working to reduce youth unemployment, as more support of the informal economy will in turn increase the informal economy's success stories and thus grow the numbers of employers and the labour market capacity.

5 Conclusion

Creating jobs is arguably South Africa's single most important task, which is why job creation should be central to the local municipalities' priority objective of eliminating poverty by 2030. The aim of the article was to ask whether youth unemployment can be reduced through informal business development in the

eThekweni Municipality. It has been shown that youth unemployment can be reduced by informal business development and the municipality is working to empower people with the relevant training and skills to do the jobs required so they can become valuable contributors to the economy. The challenges facing local government and society are substantial, but not insurmountable. Local governments do however need to try non-traditional approaches in reducing youth unemployment – so that even the illiterate can effectively participate in economic activities.

The study highlights that the reduction of youth unemployment requires varied and multiple interventions, support and economic shifts. This is particularly true since different businesses and individuals have unique needs and preferences and begin to operate in the marketplace from different starting points. Therefore no one policy or programme can completely solve the youth unemployment problem in the eThekweni Municipality. The youth have different needs and the youth interviewees expected varied support from the government. Therefore, government should also have various policies and programmes to meet the youth's needs.

Partnerships are very important and it is clear that partnerships with other organisations may assist the municipality fulfil its role of supporting young entrepreneurs. The findings further suggest that some partnerships between the municipality and groups interested in assisting the youth have not been successful, with participants arguing that there is a need for more partnerships with stakeholders to have different parties supporting youth programmes from various standpoints. Furthermore, to help small businesses make a significant impact on the labour market, the local small and informal businesses need to be supported so that they can expand and invent new ways to meet the needs of the local community. Both formal and informal businesses are started by entrepreneurs who share some of the entrepreneurial qualities characterised in the literature. However, the challenge is matching assistance programmes with the kinds of support the entrepreneurs need so that they are relevant and more likely to be successful.

For unemployment to be reduced through informal business development, the whole thinking on the informal economy needs to be changed and the youth need to see the value of participating in it. The contribution of the informal economy in the development of local communities has already been proven and participants said that, without doubt, the development of the informal economy will bring about positive benefits. Although informal business development will not make direct short-term contributions to the municipality's labour market, the informal economy is very important for the youth to practice business functions – because the failure costs are low. To create an environment in which the municipality has to work with all stakeholders in solving unemployment from different standpoints, the

municipality's business support groups should work with entrepreneurs from all sectors – which will contribute to bridging the gap between the informal and formal economy.

The findings showed that the informal economy does not have a significant impact on completely mitigating the unemployment problem in the municipality. However, the sector is very important for economic growth and development, as well as job creation – which will begin to alleviate the unemployment problem. Thus both the formal and informal sectors of the economy need to be examined as potentially providing the first steps to achieving the long-term employment goals of the eThekweni Municipality.

The findings suggest that increased support will eventually lead to increasing numbers of employers and informal economy success stories. This shows that the development of informal businesses has a powerful potential to result in job creation. However, most importantly, it will promote creative and innovative thinking as people will start exploring the less visible sectors in the informal economy – thus leading to local economic development.

References

1. Adrian, H. 2011. Participation Levels of 18-24 Year Olds in Part-Time or Full-Time Education or Training Activity. Research Report.
2. Boateng, G. O., Boateng, A. A. & Bampoe, H. S. Barriers to Youth Entrepreneurship in Rural Areas of Ghana: A Case Study of Komendaedina-Eguafo-Abirem (Keea) In the Central Region of Ghana Authors. Global Conference on Business & Finance Proceedings, 2014. Institute for Business & Finance Research, 460.
3. Boeri, T. & Van Ours, J. 2013. The Economics of Imperfect Labor Markets, Princeton University Press.
4. Bosch, M., And J. Esteban-Pretel. 2012. "Job Creation and Job Destruction In The Presence Of Informal Markets." *Journal of Development Economics* 98: 270–286.
5. Bruwer, J. 2012. The Entrepreneurial Mind-Set Profile of South African Small Medium and Micro Enterprises (SMMEs) In the Cape Metropole. *Africa Journal of Business Management*, 6, 5383-5388.
6. Burke, A. E., Fitzroy, F. R., and M. A. Nolan. 2008. "What Makes A Die-Hard Entrepreneur? Beyond the 'Employee or Entrepreneur' Dichotomy." *Small Business Economics* 31: 93–115.
7. Chang, H. -J. 2011. *23 Things They Don't Tell You About Capitalism*. London: Bloomsbury Press.
8. Corradi, A. A. 2012. "Informal Networks In Business Development Services: Case Studies From Two Brazilian Business Incubators." *Eur-Iss-Ciri, Research Report*.
9. Dewar, D. 2005. "A Conceptual Framework for the Formulation of an Informal Trader Policy for South African Towns and Cities." *Urban Forum* 16: 1–16.
10. Dobson, R. And C. Skinner. 2009. *Working in Warwick: Including Street Traders in Urban Plans*. Durban: University Of Kwazulu-Natal.
11. Du Toit, R. 2003. "Unemployed Youth in South Africa: The Distressed Generation?" Minnesota International Counselling Institute.
12. Du Toit, R. 2003. *Unemployed Youth in South Africa: The Distressed Generation?* Minnesota International Counseling Institute, 27.
13. EThekweni Municipality. 2001. *Informal Economy Policy*.
14. EThekweni Municipality. 2007. *Youth Development Policy (YDP)*.
15. EtheKweni Municipality. 2012a. *Integrated Development Plan (IDP), 5 Year Plan: 2012/13*.
16. EtheKweni Municipality. 2012b. "Economic Development & Growth in EtheKweni, Your Guide to EtheKweni's Economy." *Tackling Youth Unemployment Quarterly Index* 3.
17. EtheKweni Municipality. 2013. "Labour Market Report". Available: [Http://Www.Durban.Gov.Za/Resource_Centre/Edge/Pages/Default.AspX](http://Www.Durban.Gov.Za/Resource_Centre/Edge/Pages/Default.AspX). Accessed 30 June 2013.
18. Filmer, D. & Fox, L. 2014. *Youth Employment in Sub-Saharan Africa*, World Bank Publications.
19. Filmer, D., and L. Fox. 2014. *Youth Employment in Sub-Saharan Africa*. World Bank Publications.
20. Gratton, L. 2013. "Youth Unemployment is one of the World's Biggest Challenges." Accessed 11 March 2013. [Http://Gulfnews.Com/Business/Opinion/Youth-Unemployment-Is-One-Of-The-World-S-Biggest-Challenges-1.1155621](http://Gulfnews.Com/Business/Opinion/Youth-Unemployment-Is-One-Of-The-World-S-Biggest-Challenges-1.1155621)
21. Gratton, L. 2013. "Youth Unemployment is one of the World's Biggest Challenges. Accessed 11 March 2013. [Http://Gulfnews.Com/Business/Opinion/Youth-Unemployment-Is-One-Of-The-World-S-Biggest-Challenges-1.1155621](http://Gulfnews.Com/Business/Opinion/Youth-Unemployment-Is-One-Of-The-World-S-Biggest-Challenges-1.1155621)
22. Grigoryeva, N. 2012. "The Problem of Youth Unemployment in Rural Area." *Agris On-Line Papers in Economics & Informatics* 4: 3–12.
23. Hall, J. K., Daneke, G. A., and M. J. Lenox. 2010. "Sustainable Development and Entrepreneurship: Past Contributions And Future Directions." *Journal of Business Venturing* 25: 439–448.
24. Hammer, T., and C. Hyggen. 2010. "Lost In Transition? Substance Abuse and Risk of Labour Market Exclusion from Youth to Adulthood." *Norsk Epidemiologi* 20: 93–100.
25. Jones, G. 2013. "Youth Unemployment – Is Entrepreneurship The Answer?" Accessed 11 March 2013. [Http://Www.Fm.Co.Za/Economy/2013/03/05/Youth-Unemployment-Is-Entrepreneurship-The-Answer](http://Www.Fm.Co.Za/Economy/2013/03/05/Youth-Unemployment-Is-Entrepreneurship-The-Answer)
26. Karumbidza, J. B. 2013. *EtheKweni Municipality, Ntuzuma, Site Visit*.
27. Leach, K. 2013. "Why Mainstream Community Economic Development? Because It Works." Accessed 11 March 2013. [Http://Www.Resilience.Org/Stories/2013-03-08/Why-Mainstream-Community-Economic-Development-Because-It-Works](http://Www.Resilience.Org/Stories/2013-03-08/Why-Mainstream-Community-Economic-Development-Because-It-Works)
28. Ligthelm, A. A. 2008. "A Targeted Approach to Informal Business Development: The Entrepreneurial Route." *Development Southern Africa* 25: 367–382.
29. Lund, F., and C. Skinner. 2003. "The Investment Climate for the Informal Economy: The Case of Durban, South Africa." *Background Paper for the 2005 World Development Report*. Accessed June 2013.

- [Http://www.wiego.org/papers/2005/unifem/21_lund_skinner_sa-durban_case_study.pdf](http://www.wiego.org/papers/2005/unifem/21_lund_skinner_sa-durban_case_study.pdf)
30. Lund, F., and C. Skinner. 2004. "Integrating the Informal Economy in Urban Planning and Governance." *International Development Planning Review* 26: 431–456.
 31. Maloney, W. F. 2003. *Informal Self-Employment: Poverty Trap or Decent Alternative*. Boston: Kluwer.
 32. Mizuno, K., Mizutani, F., and N. Nakayama. 2006. "Industrial Diversity and Metropolitan Unemployment Rate." *The Annals of Regional Science* 40: 157–172.
 33. Mohr, P. 2010. *Understanding the Economy*. Cape Town: Van Schaik Publishers.
 34. Mthembu, N. 2005. "Survival Strategies of Individuals and Households Affected By Unemployment in the Ethekwini Municipality." *Rassp Research Reports*.
 35. Naudé, W. 2011. "Entrepreneurship Is Not A Binding Constraint On Growth And Development In The Poorest Countries." *World Development* 39: 33–44.
 36. Nel, E. L., and C. M. Rogerson. 2005. *Local Economic Development in the Developing World: The Experience of Southern Africa*. New Brunswick: Transaction Publishers.
 37. Nkechi, A., Emeh Ikechukwu, E. & Okechukwu, U. F. 2012. "Entrepreneurship Development and Employment Generation in Nigeria: Problems and Prospects." *Journal of Education and General Studies*, 1, 088-102.
 38. Nkechi, A., Emeh Ikechukwu, E., and U. F. Okechukwu. 2012. "Entrepreneurship Development and Employment Generation in Nigeria: Problems and Prospects." *Journal of Education and General Studies* 1: 088–102.
 39. Parker, S. C. 2004. *The Economics of Self-Employment and Entrepreneurship*. Cambridge: Cambridge University Press.
 40. Patunru, A. A., McCulloch, N. & Von Luebke, C. 2009. *A Tale of Two Cities: The Political Economy of Local Investment Climate in Solo and Manado, Indonesia*. Ids Working Papers, 2009, 01-43.
 41. Presidency. 2012. *National Youth Development Policy (NYDP)*.
 42. Rogerson, C. 2008. "Tracking SMME Development in South Africa: Issues of Finance, Training and the Regulatory Environment." *Urban Forum* 19: 61–81.
 43. Rogerson, C. M. 1999. "Local Economic Development and Urban Poverty Alleviation: The Experience of Post-Apartheid South Africa." *Habitat International* 23: 511–534.
 44. Rogerson, C. M. 2004. "The Impact of the South Africa Government's SMME Programme: A Ten Year Review (1994-2003)." *Development Southern Africa* 21: 53–62.
 45. Román, C., Congregado, E. & Millán, J. M. 2013. "Start-Up Incentives: Entrepreneurship Policy or Active Labour Market Programme?" *Journal of Business Venturing*, 28, 151-175.
 46. Román, C., Congregado, E., and J. M. Millán. 2013. "Start-Up Incentives: Entrepreneurship Policy or Active Labour Market Programme?" *Journal of Business Venturing* 28: 151–175.
 47. Rwigema, V. U. 2008. *Entrepreneurship: Theory in Practice*, Cape Town, Oxford University Press, Southern Africa.
 48. Ryan, P. 2001. "The School-To-Work Transition: A Cross-National Perspective." *Journal of Economics Literature* 36: 34–92.
 49. Skinner, C. 2000. "Getting Institution Right: Local Government and Street Trading In Four South African Cities." *Urban Forum* 11: 27–56.
 50. Skinner, C. 2003. *The Informal Economy Employment Data: A Critical Analysis*. Forum Papers. School Of Economics, University Of Cape Town.
 51. Skinner, C. 2005. *Constraints to Growth and Employment in Durban: Evidence from the Informal Economy*. Research Report.
 52. STATSSA, 2012. *The South Africa I Know, the Home I Understand*. Statistics South African. Kwazulu-Natal.
 53. Szabo, Z. K., and E. Herman. 2012. "Innovative Entrepreneurship for Economic Development in EU." *Procedia Economics and Finance* 3: 268–275.
 54. Taylor, R. L. 2004. "Pursuing the Global Economy: Assistance for Small Businesses." *Competitiveness Review* 14: 82–89.
 55. Thurik, A. R., Carree, M. A., Van Stel, A. & Audretsch, D. B. 2008. "Does Self-Employment Reduce Unemployment?" *Journal of Business Venturing*, 23, 673-686.
 56. Webb, J. W., Bruton, G. D., Tihanyi, L., and R. D. Ireland. 2012. "Research on Entrepreneurship in the Informal Economy: Framing a Research Agenda." *Journal of Business Venturing* 2-17.
 57. Wickham, A. P. 2001. *Strategic Entrepreneurship*. United Kingdom: Pearson Education Limited.
 58. Williams, C. C. & Lansky, M. A. 2013. "Informal Employment in Developed and Developing Economies: Perspectives and Policy Responses." *International Labour Review*, 152, 355-380.
 59. Williams, C. C., and M. A. Lansky. 2013. "Informal Employment in Developed and Developing Economies: Perspectives and Policy Responses." *International Labour Review* 152: 355–380.
 60. Zack-Williams, T., Frost, D. & Thomson, A. 2002. *Africa in Crisis: New Challenges and Possibilities*, Sterling, Va., Pluto Press: London.
 61. Chukuezi, C. O. 2010. "Urban Informal Sector and Unemployment in Third World Cities: The Situation in Nigeria." *Asian Social Science*, 6, 131-137.
 62. Craddock, F. 2012. *Bringing It All Back Home: An Innovative Approach to the Provision of Tailored Education and Training for Young People-The Experience of the Adult Better Learning and Education (ABLE) 18-21 Programme*. *Adult Learner: The Irish Journal of Adult and Community Education*, 98-114.
 63. Wilson, K., Stemp, K. & McGinty, S. 2011. "Re-Engaging Young People With Education And Training: What Are The Alternatives?" *Youth Studies Australia*, 30, 32-39.
 64. Essop, H. & Derek, Y. 2008. *The South African Informal Sector (1997 – 2006)*. Available: [Http://www.ekon.sun.ac.za/wpapers/2008/wp032008/wp-03-2008.pdf](http://www.ekon.sun.ac.za/wpapers/2008/wp032008/wp-03-2008.pdf) [Accessed 01 July 2013].
 65. Bianchi, M. & Henrekson, M. 2005. "Is Neoclassical Economics Still Entrepreneurless?" *Kyklos Wiley Library*, 58, 353-377.
 66. Williams, C. C. 2007. "Entrepreneurs Operating In the Informal Economy: Necessity or Opportunity Driven?" *Journal of Small Business & Entrepreneurship*, 20, 309-319.

THE EFFECTS OF SHADOW BANKING ON THE TRADITIONAL BANKING SYSTEM IN ZIMBABWE

Virimai Mugobo, Misheck Mutize**

Abstract

The growth of shadow banks changed the face of banking in Zimbabwe. Their inconsistent product nature and complexity of form has been a cause for concern to regulatory authorities. The interrelationship between their financial intermediary role and that of formal banks has made them good substitutes to formal banking. This study conducts a statistical analysis of the country's monetary aggregates and the total formal bank loan-to-deposits balances. The findings of this analysis show that the shadow banking system has always been a critical element of the formal banking sector which resulted from market needs and it completes the banking system. The shadow banking system does not pose direct threat to the formal banking system but it was a result of failure to attract savers who found shadow banks as a good alternative.

Keywords: Financial Intermediaries, Substitutes, Monetary Aggregate and Threat

**Cape Peninsula University of Technology, South Africa, Faculty of Business Studies, Keizersgracht Cnr. Tennant St. Zonnebloem, Capetown, 7925*

1 Introduction

Globally, shadow banks are defined as non-depository institutions that survive on short-term funding provided by asset-backed commercial paper and the repo market, in which borrowers offer collateral as security against a cash loan and then sell the security to a lender and agree to repurchase it at an agreed time in the future for an agreed price. Shadow banks, which are often based in tax havens, invest in long-term loans like mortgages, providing credit across the financial system by matching investors and borrowers individually or by becoming part of a chain involving numerous entities, some of which may be mainstream banks themselves. This usually rises to be a threat to the formal banking system since shadow banks were subject to little prudential regulatory and supervisory authorities.

In Zimbabwe, the Central Bank has been struggling to formally delineate the shadow banking limits as well as controlling their operations through a number of policy initiatives that has been aimed at improving monitoring and regulation. The formal banks also took a stance in response to these shadow banks to shield themselves from these threats. However regardless of the monitoring recommendations, policy shift and formal banking response, shadow banks' disintermediation role seem to be on the rise.

There has been very little analytical study done on shadow banking in Zimbabwe as compared to the growing trend of such study globally. Sketchy literature showed that shadow banks obscure their

shapes and sizes; and many of their entities do not report to government regulators which make it difficult to estimate their sizes and to monitor their development. To contribute to this discussion, this researcher documented the institutional features of shadow banks, analysed their operations as well as their threats to the traditional banking system. Objective of this study is to establish the implications of shadow banking activities on formal the banking system.

2 Review of related literature

As early as the eighteenth century, before the traditional banking system came to maturity, international financial networks that resembled shadow banks were in existence; credit intermediation service was being provided based on collateral. The introduction of the first Basel Capital Accord (Basel I of 1988) set an international minimum capital standard for formal banking operations, introducing more incentives to take risks off banks' balance sheets through securitisation. This led to an extensive financial innovation phase and development of structured products that became a key feature of the current shadow banking system.

Financial intermediation outside the traditional banking system is not a new phenomenon in Zimbabwe though the country had a less developed financial services sector for long since post-independence. As early as 1990, before the regular banking system¹ came to maturity, financial networks

¹ Formal banking system

were in place, with credit intermediation services being provided based on collateral. Zimbabwe has been an important hub of those systematic structures outside the regular banking system that are designed to help circumvent regulations.

The products and services offered by the shadow financial system were mainly appreciated by households who are deprived of creditworthiness because they offer them an opportunity to access credit (Pozsar, 2010). Ricks (2010) argued that these individuals who are perceived to be unbankable by the formal banks are forced by their personal situation to take high-interest loans from shadow banks. The FSB (2011) also echoed that participation of shadow banking entities in liquidity and credit transformation can significantly reduce the cost of lending. In the case of Zimbabwe, the lending gap between formal banks lending rates and shadow banks lending rates has been widening. This can be explained in terms of serious liquidity constraints in the formal banks, there have been very thin new loan portfolios in formal banks, which cited a slowdown in broad money supply growth and growth in the unbanked bracket of the economy.

Barua (2008) concurred with Endut and Toh (2009) on that shadow banks offer numerous advantages for individuals affected by the exclusion from formal banking system. He claimed that these entities provide financing sources for both consumer expenditure and start-up capital for entrepreneurial businesses. The access to loan products facilitates household finance management, such as allowing them to cover temporary financial resources shortages in such circumstances as the primary breadwinner falling on the unfortunate (Barney, 1991). For many of them, small amounts in loans are critical and allow for life quality improvement such as by exchanging pawning their household appliances for cash.

The public view shadow banking as an opportunistic advantage because they are able to take out loans from these alternative financial intermediaries, either formal or informal (Białowolski, 2012). The financially excluded individuals simultaneously borrow from a number of shadow banks resulting in an over-indebtedness situation; this means no possibility to meet repayment deadlines of all contracted debts (Carmichael, 2010). If this is the case, the installments for one entity are paid by means of the loan taken another financial intermediary and therefore the loop of indebtedness keeps escalating because of the high interest charges. The indebted household takes a loan from one shadow bank to pay back another shadow bank's commitments. As the result the problem of financial exclusion becomes even stronger, thereby justifying traditional banks' strict vetting system.

Kappel (2010)² also submitted how excess liquidity available in the shadow banking system has

driven households to high debt incurring because of less stringent conditions for loans. This unrestrained access to financing sources, especially in case of individuals who cannot manage their personal finances satisfactorily, instead of their household economic situation improvement; it results in deeper poverty and bad loans, also draining capacity from the shadow banks.

Carmichael & Pomerleano (2010) examined the factors that drive the growth of shadow banking in both developed and emerging markets. In their conclusion, in developed markets, the growth of shadow banks is mainly driven by the benefits those accrue to specialisation. In the emerging markets; they often play a broader role in deepening financial markets and overcoming legal and regulatory shortcomings. However, in Zimbabwe there is evidence of regulatory arbitrage as a major factor driving the growth of shadow banks. Ineffective or non-existent financial regulation may have led to excessive risk taking by both shadow banking institutions and investors who invest in them.

Acharya et al. (2011) and Plantin (2012) argued that shadow banking boom precede every banking crisis. They bypass banking capital requirements, there by achieving a higher leverage than that permitted by prudential regulation. The main competitors for traditional banks have been specialized shadow banks such as savings and loans clubs and credit societies. The evidence from Zimbabwe led this researcher to argue this assertion that the growth of shadow banks is entirely driven by regulatory arbitrage; if that was the fact, regulators would have already introduced radical measures to get rid of the shadow banks due to potential dangers of systemic stability in the formal banking sector and the costs in terms of financial failures.

Endut and Toh (2009) drew attention to the role of shadow banks in the provision of credit to the people who have been excluded by banks, owing to their insufficient creditworthiness or due to negative history of previously contracted debts repayment. This group often covers low educated individuals, from smaller locations and affected to a greater extent by the job market problems (Białowolski, 2012). In other cases, a person who has low income or who obtains income from an undeclared work (informal entrepreneurs) does not represent a trustworthy partner for formal banks though he/she might have the capacity to repay loan advances. It is this population which constitutes core clientele of shadow banks and sustains them.

²An economic scientist at The University of Zurich, Switzerland

3 Methodology

To explore this problem and possible solutions, the researcher adopted a cross sectional descriptive survey research method. Monetary aggregates and total formal bank assets were used to determine shadow banking intermediation size; these were used for statistical analysis. The researcher used desk research to gather data from academic journals, documents over the internet and business newspapers on the

research area. These sources were preferred because more information was obtained without consuming much time. Given the sensitivity of the research to the regulators, the researcher's conclusions were mainly based on information provided by secondary data sources. Secondary data was comparatively easy to obtain since the monetary data was readily available on the RBZ website.

Table 1. Analysis of Co-linearity

	M1	M2	M3	TBL	TBD	PL	THL	EL	DC	PSC
M1	1.00									
M2	1.00	1.00								
M3	1.00	1.00	1.00							
TOTAL BANK LOANS (TBL)	1.00	1.00	1.00	1.00						
TOTAL BANK DEPOSITS (TBD)	-0.01	-0.01	-0.01	0.01	1.00					
PRESCRIBED BANK LIQUIDITY (PL)	0.00	0.00	0.00	-0.01	0.05	1.00				
TOTAL HELD LIQUIDITY (THL)	0.06	0.06	0.06	0.06	0.05	1.00	1.00			
EXCESS LIQUIDITY (EL)	0.07	0.07	0.07	0.07	0.05	1.00	1.00	1.00		
DOMESTIC CREDIT (DC)	0.80	0.80	0.80	0.80	0.02	0.60	0.65	0.66	1.00	
PRIVATE SECTOR CLAIMS (PSC)	0.80	0.80	0.80	0.80	0.02	0.60	0.65	0.66	1.00	1.00

To explain threats relationships of shadow banks, this research used an Ordinary Least Squares (OLS) regression analysis on the monetary aggregates and total bank deposits to determine the relationships between formal banks' liquidity and that of shadow banks. Though data availability on shadow banks size remained the biggest challenge, this research used RBZ monetary statistics which was published on monthly basis. The full data was only available from 2006 to 2013 which restricted the period of analysis for this research to the 7 years from 2006. Variables that were used were monetary aggregates (M1³, M2⁴, and M3⁵), total bank deposits and total bank loans to determine the monetary size of shadow banks. However GDP nominal growth rate was also included since it was considered as a monetary measure though it was a macroeconomic variable which hypothetically explained broadly the behaviour of both banks and non-bank financial services providers.

A correlation test was done to ensure that there is no multi-collinearity on the independent variables to avoid interdependence and redundancy in related variables. Below is a summary of the correlation analysis between the variables under study.

The perfect positively correlated variables (red) move in the same direction, therefore including all of them in the data analysis model results in variable redundancy.

³ M1 is the country's money supply, the total amount of money in circulation, cash and near cash, only that which can be used as medium of exchange..

⁴M2 is M1 + savings deposits + money market instruments + other time deposits which can easily be converted to cash.

⁵M3 is M2 + M1 + long term deposits + institutional money market deposits + other larger liquid assets. This is the entire money supply in an economy (RBZ report, 2013)

4 Results

Shadow banks evidently make bigger profits from repaid loans rather than disposing defaulters' collateralized assets. The surge in shadow banks in 2006 has been attributed to new customers looking for smaller loans against the backdrop credit tightening stance by many formal banks. Though policy makers keep scrutinizing informal lending, excessive demand for lending services from small business owners and individuals who find it hard to access credit could not resist shadow banks.

From the regression analyses; the shadow banking model, 95% of response variable variation was explained by the model. On the other hand, only 1% of bank deposits were explained by the independent variables in the bank deposits model; which means the data was nowhere close to fitting the multivariate regression. Theoretically, the higher the R the better the model fits the data.

The Residual Mean Square⁶ is essentially the standard deviation of the points around the regression line. The shadow banking model had no standard errors on all variables; this meant that, using the model for prediction was most likely to produce 95% accurate results. For the banking loans and deposits model, the result was very high numerical values. The standard errors on the intercept were also very high, signifying high possibility for errors if the model is used for prediction.

⁶ Measures the average of the squares of the errors; the difference between the estimator and what is being estimated.

Table 2. Formal bank loans output model

<i>Regression Statistics</i>						
Multiple R	0.99988					
R Square	0.99975					
Adjusted R Square	0.99974					
Standard Error	1.93E+14					
Observations	96.00000					

<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	5	1.34E+34	2.69E+33	72138.44	0.00	
Residual	90	3.35E+30	3.72E+28			
Total	95	1.34E+34				

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	23,991,687,315,456.00	0.00	0.06	0.96	(0.01)	0.01
M3	(2,345,786,791,262,560.00)	8,164,995,605,926,880.00	-0.29	0.77	-1.86E+16	1.39E+16
PBL	(15,855,042.72)	36,554,875.85	-0.43	0.67	-8.85E+07	56767596.88
TLH	2,345,786,793,775,190.00	8,164,995,606,297,880.00	0.29	0.77	-1.39E+16	1.86E+16
DC	0.00	0.00	0.06	0.96	-0.01	0.01
SB	2,345,786,791,311,250.00	8,164,995,605,926,800.00	0.29	0.77	-1.39E+16	1.86E+16

From the analysed data, shadow banking was a product of other variables, it could not have existed on its own; there was no intercept in the model. A 1% increase in M3 resulted in 1% increase in shadow banking growth. Also, a 1% decrease in total liquidity held by formal banks increased shadow banking growth by 1%. Other variables like; total bank loans, total bank deposits, prescribed bank liquidity and domestic credit had no effect on the growth of shadow banks. From this analysis, shadow banks were a result of money supply growth and total liquidity held by formal banks. Shadow banking institutions had a tendency of underestimating the value of the collateralised assets that both parties are normally exposed to unfair pricing and unfair reliance upon possibly wrong information.

About US\$188 trillion that flowed through the formal banks was not affected by changes in the banking variables for the period 2006 to 2013. Above US\$188 trillion, every additional US\$1 increase in formal banks deposits was a result of about US\$18 sextillion decrease in M3, US\$18 sextillion increase in total liquidity held by formal banks and US\$18 sextillion increase in shadow banks growth. However prescribed formal banks liquidity level had a negative effect of approximately US\$116 million on every dollar unit growth in formal bank growth. Bearing in mind that this model was high risk of prediction failure because of its low R Square, domestic credit was irrelevant to the growth of formal bank deposits.

Table 3. Aggregate bank balances in US \$ million

	2006	2007	2008	2009	2010	2011	2012	2013
Prescribed liquidity	462919.33	2840147.30	60238817.91	25879.76	270.48	614.63	857.89	1063.60
Total held liquidity	742712.20	12296395.33	394142200.59	9478.18	929.59	1115.63	1295.63	1408.30
Excess liquidity	279792.87	9456248.03	333903382.68	17024.37	659.12	501.01	437.73	344.70
Total bank deposits	495786.96	12867386.13	10292105921409700.00	304510.64	970111.74	1761002.62	2408522.83	3051447.93
Total bank loans	1061133.75	26677766.15	1283732498935420.00	670855.32	1678743.68	2595450.99	3321821.19	3877593.03

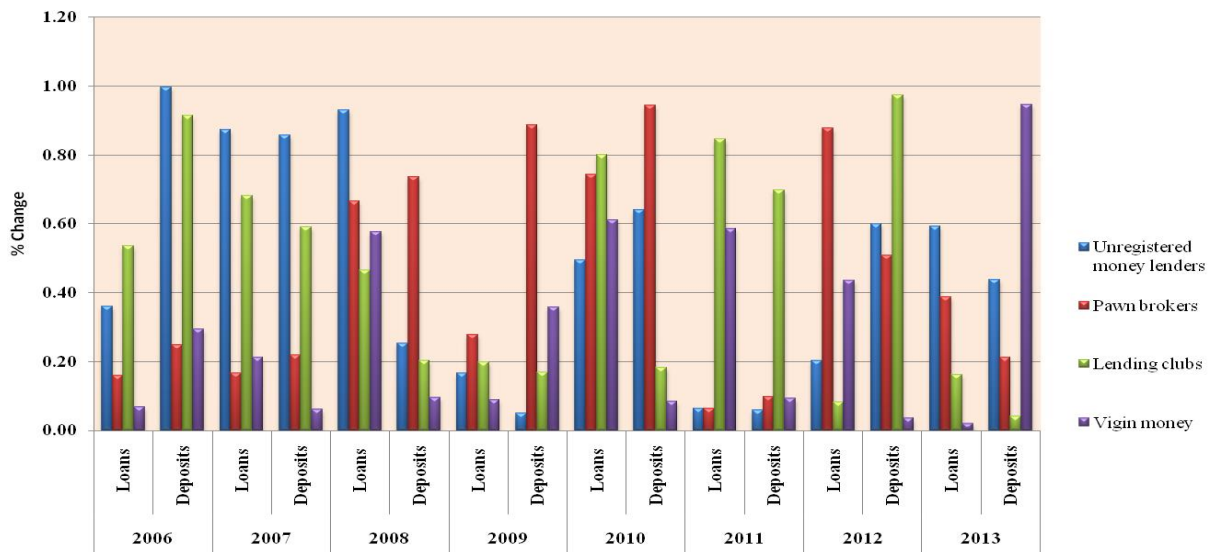
The US\$23 trillion loans that went through the formal banks were independent of other variables effects. Above that, every US\$1 decrease in formal bank loans resulted from about US\$2 sextillion growth in money supply and approximately US\$15 million rise in prescribed bank liquidity. Approximately US\$2 sextillion growth in total liquidity held by formal banks resulted in US\$1 growth in total bank loans. Also about US\$2 sextillion change in formal bank loans was a result of US\$1 increase in formal bank loans. However, from the analysis, domestic credit

was also irrelevant to the growth of formal banks' loan portfolio.

4.1 Changes in shadow banking products

There was no particular pattern or trend in the change of percentage growth in shadow banking products. However an analysis on the fundamental elements of shadow banks would be interpreted. The graph below shows percentage changes in approximate amounts held by major players in the shadow banking system.

Figure 1. % change in shadow banking products



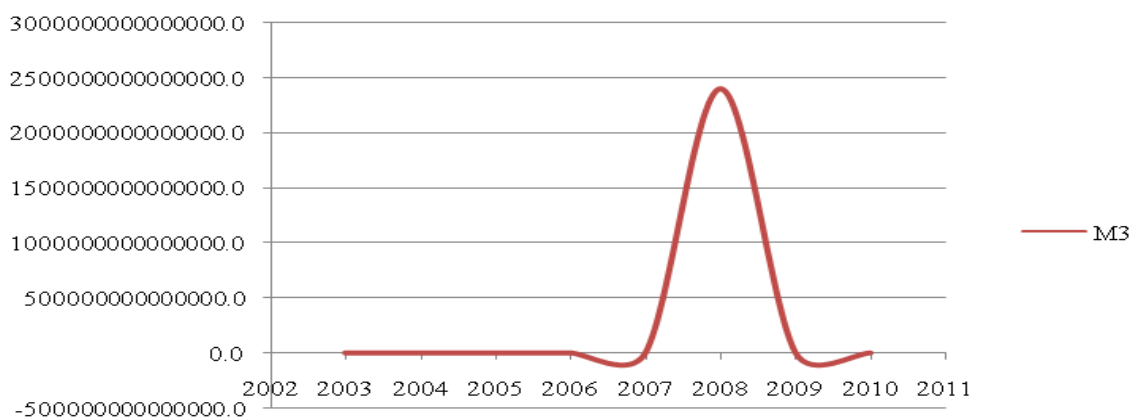
Source: Primary data

There were no negative changes in shadow banking growth on amounts held by the institutions, only slow growth was noticeable in virgin money activities for the whole period. The high risk of default and low disposable income might be an interpretation to this. Unregistered moneylenders took their toll in the 2006 to 2007 period, with growth of upto 100 percent being realised in 2006. Lack of alternative investment options could be the evidence of the 95% boom in virgin money coming into the shadows. Lending clubs remained popular for the whole period as they could have proved to be the best option to raise capital for new or struggling businesses and also a safe way to earn some secured interests for members with surplus

cash. The high interest rates charged by shadow banks averaging 25 % per month attracted more investors into the market to fund these lucrative businesses. However the short term loan durations means high risk borrowers were most likely to default on repayments.

Zimbabwe, the lending gap between formal banks' lending rates and shadow banks' lending rates has been widening. This might be explained in terms of serious liquidity constraints in the formal banks, there have been very thin new loan portfolios in formal banks, which cited a slowdown in broad money supply growth and growth in the unbanked bracket of the economy.

Figure 2. Monetary aggregate (M3): % growth



Source: Primary data

For the shadow banking model, only the effects of M3 and total liquidity held by banks had high values, indicating a low probability that the coefficients could have been obtained by chance. Both, the formal banking deposits and loans models had very small values of *t* indicating that it was likely

to have occurred by chance. This test could also be explained by probability of values (p-values) which gave the numerical probabilities that the estimates obtained could have occurred by chance when their true values were actually zeros. For the formal bank deposits and loans models analysed, the probabilities

were above 50% therefore, there could have been really no relationships between the dependant and independent variables. Only the shadow banking model had very small probabilities on the intercept, M3 and total liquidity held by banks; more confidence that there was a relationship between the variables.

5 Conclusion

The shadow banking system has always been an element of the banking sector intermediation. Empirically, it is a result of almost the same elements that sustains the traditional banking system. The systematic shadow banking structures outside the formal banking system may not have been entirely designed to circumvent regulations, but was a result of market needs to complete the banking system. The research results therefore contradicts the view of Pozsar (2010) that the shadow banking system is a web of specialized unregulated institutions that competes to channel funds outside the formal banking system.

The shadow banking system cannot be perceived as threat to the formal banking system because of its high liquidity maintenance in times when formal banks are facing liquidity crunch. The analysed results showed no significant influence of shadow banks on the formal banking system's deposit growth. The liquidity crisis in formal banks could not have been directly connected to the growth of shadow banks. Other factors like failure to negotiate fresh lines of credit, depleted nostro accounts, lack of confidence both by investors and potential depositors; could have led to decrease in deposit inflows into the formal banking system. Shadow banks only existed as an alternative service provider preferred maybe due to their short term investment tenure and less stringent terms.

Shadow banks threats could be measured in terms of the products and services offered by the traditional financial system. As a marketing tool, the results aligned with Pozsar (2010)'s conclusion that shadow banking products are mainly appreciated by households who are deprived of creditworthiness. This cannot be classified as threat to formal banks since it's a niche market. Though recently banks, like POSB and AfriAsia, has been diversifying into micro lending, posing competition to shadow banks. However threat can be perceived in the size of capital that is slipping through shadow banks, this capital would have still remained unbanked even in the absence of the shadow banking system.

Shadow banks are a necessary element of the banking system; their product invention techniques play a broader role in deepening financial markets. This agreed to the view of Carmichael and Pomerleano (2010) that the growth of shadow banks was mainly driven by the benefits that accrue to specialisation. However the challenging issue was on overcoming legal and regulatory shortcomings. Empirically, they thrived on regulatory arbitrage;

ineffective and/or non-existent financial regulation. The regulators have introduced a new code of conduct for micro lenders and new harnessed microfinance act, still there were regulatory gaps such as the Savings and Credit Co-operative Societies offering the same finance products as microfinance but still falling under the Ministry of Small to Medium Enterprises as an Indigenization and Empowerment tool.

The assertion by Acharya and Plantin (2012) that shadow banking boom precede banking crisis was very subjective. The perceived benefits by shadow banking clients may not have been benefits in real terms but rather costs; after transacting through a shadow bank, defaulting individuals normally loose assets in tune of property or deposits for investor, they normally find themselves in a worse-off position. The advantages of shadow banking are a merely illusive to clients, especially those who do not numerically quantify the costs of transactions.

Dowla and Barua (2006) revealed that shadow banking improves standard of living through provision of productive capital. The quantitative conclusions from this research showed that, the shadow banks actually depletes people's disposable income and worsen their standard of living. The cost of borrowing from shadow banks was too high such that it was very difficult, or almost impossible for borrowers to make a positive real return. Those who deposit their savings in shadow banks are merely enticed by high interests offered on a deposit which in actual fact they don't realise it.

The estimations of the formal banking sector's total deposits increase for the period to December 2013 could not be attributed to be a result of improvements in financial intermediation. Dollarization had positive effects on the improvements of deposit growth because there was evidently high amount of capital flow into traditional banks independent of effects of analysed external elements. The variations of deposit tenure were not significant; this could be explained in terms of huge numbers of small deposits. The formal banking system had no control over shadow banking boom but could only respond to shield themselves from shadow banking liquidity pressure negativities.

The relationship between formal bank loan and shadow banking growth could also have been affected of government indigenization policy. Government, for the past decade, has been aggressively pushing economic stakeholders to support its indigenization and empowerment policy. Formal banks have been caught in the storm, being pushed to lend to high risk sectors and individuals, otherwise they were perceived to be anti-government. This weakened the banking sector in Zimbabwe because the majority of the defaulting client companies and individuals were aligned to the ruling party, who used their political muscle to circumvent loan repayments regardless of banks' aggressive loan recovery strategies.

The development of shadow banking in Zimbabwe was wholly a product of total money supply growth (M3) and total liquidity held by the formal

banking system according to the research results. Shadow banking development had no direct effect on formal banking system growth.

Table 4. Monetary indicators: Zimbabwe

Year	2003	2004	2005	2006	2007	2008	2009	2010
Multiplier	4.8	3.9	4.2	3.5	2.6	5.7	12.9	10.0
Currency/Deposit ratio	13.3	16.5	20.8	22.3	32.5	13.5	0.0	0.0
M3	14.8	10.5	16.7	25.9	5413.9	2405267224035810.0	16.2	4.3

An independent logical analysis of the banking regulation in Zimbabwe showed that, it has been difficult for the authorities to control shadow banks. Evidence showed that, the regulators in fact have not been putting enough effort to establish the operational consensus of shadow banking effort. Their failure to define operational guidelines and classification of the shadow banking system was a baseless excuse. This researcher concluded that, above the cautious approach by regulators to the control of shadow banks, their reaction has been too relaxed and reactive. The RBZ only merged the micro lending acts as a reaction measure to the banking sector manipulation by shadow banks rather than being proactive and avoid the banking crisis that hit the country recently. Also the fact that the Small to Medium enterprises ministry still regulate money lending clubs casted a dark cloud on the commitment of regulators to account for the shadow banking system. The implications of shadow banking growth coupled with failure of regulators to manage their growth are high potential risk. Though shadow banking balances have been on the upward trend, their liabilities were short term while their assets were fairly medium to long term due to rollovers, low repayment rates and loan extensions.

The view against shadow banks as being a threat to the mainstream banks was not justifiable. Rather than treating shadow banking as a threat, this researcher, from the conclusive findings saw it as a complementary element to the formal banking system. In as much as it exerts competitive pressures on the formal banking system, it was an awakening call and necessary signal to the formal banks to improve service delivery and to be innovative. In this researcher's view, though regulators want total control of the financial system elements, their aim on the shadow banking system should be to regulate their risk appetite that could lead to systemic risk that can destabilize the whole financial system.

References

- Adrian, T and Adrian, A (2012) "The Regulation of the Shadow Banking System", a Federal Reserve Bank of New York Staff Report, 559.
- Adrian, T and Shin, H (2010) *The Changing Nature of Financial Intermediation and the Financial Crisis of 2007-09*, Princeton University Press, New York, Princeton.
- Bank for International Settlements (BIS) (2009) "Nonmonetary Effects of the Financial Crisis in
- Propagation of the Great Depression", *American Economic Review*, 73, 3, pp257-276.
- Basel Committee on Banking Supervision (2011) "An assessment of the shadow banking sector globally", a presentation at the World Finance Conference.
- European Central Bank (2013) "Enhancing the monitoring of shadow banking", *European Central Bank Monthly Bulletin*, 15 1, pp94-95.
- Financial Stability Board (2012) "Shadow Banking: Scoping the Issues", a US Monetary Policy Forum Report 5.
- Financial Stability Board (2012) "Strengthening Oversight and Regulation of Shadow Banking", A Policy Framework presentation for Strengthening Oversight and Regulation of Shadow Banking Entities.
- Ghosh, S (2012) "Chasing the Shadows: How Significant Is Shadow Banking in Emerging Markets?", *Poverty Reduction and Economic Management Network*, 88 1, pp4-10.
- Goodenough, A (2012) "Regulating Systemic Risk in the Offshore Shadow Banking Industry", *George Mason Journal of International Commercial Law*, 3 1, pp142-44.
- Gorton, G (2010) *Slapped by the Invisible Hand: The Panic of 2007*, Oxford University Press, New York, Holt.
- Gorton, G and Metrick, A (2010) "Regulating the Shadow Banking System", *Brookings Papers on Economic Activity*, 2, 1, pp261-297.
- Mutize, M. (2015). Share price reaction to public announcements in emerging markets: a case of the Zimbabwe Stock Exchange listed companies. *European Journal of Business and Management*, Vol. 7 (19) pp.84-101.
- Pozsar, Z (2011) "Institutional Cash Pools and the Triffin Dilemma of the U.S. Banking System", *IMF Working Paper*, 190, 1, pp55-101.
- Reserve Bank of Zimbabwe (2012) "Annual Economic Reviews", presentations at the Zimbabwean Economic Forum.
- Reserve Bank of Zimbabwe "Monthly Economic Reports", available on www.rbz.co.zw/publications/monthlyeb.asp.
- Rick, M (2010) "Shadow Banking and Financial Regulation", *Columbia Law and Economics*, 370, pp21-22.
- Schwarcz, S (2012) "Regulating Shadow Banking", *Review of Banking and Financial Law*, 31 1, pp30-40.
- Shleifer, A and Vishny, R (2013) "A Model of Shadow Banking", *Journal of Finance*, 68 4, pp22-50.
- Zoltan, P et al (2010) "Shadow Banking", a Federal Reserve Bank of New York Staff Report, 458.

AN INVESTIGATION OF FACTORS RELATED TO SELF-EFFICACY FOR JAVA PROGRAMMING AMONG COMPUTER SCIENCE EDUCATION STUDENTS

*Desmond Wesley Govender**, *Sujit Kumar Basak***

Abstract

Students usually perceived computer programming courses as one of the most difficult courses since learning to program is perceived as a difficult task. Quite often students' negative perceptions on computer programming results in poor results and high drop-out rates. The purpose of this study is to examine the impact of factors that affect computer science education students' Java programming self-efficacy and the relationship between Java programming self-efficacy and students' age and gender. A questionnaire was used to gather data. A scale with thirty-two items assessing Java programming self-efficacy was adapted from Askar and Davenport's (2009) computer programming self-efficacy scale. A total of twenty students from a Computer Science Education Discipline participated in this study. Collected data were analysed using SPSS version 22.0. Descriptive statistics, reliability test, mean, standard deviation, and rotated component matrix were utilized to analyze the resulting data. Results indicated that there is not much difference between males (45%) and females (55%) Java programming self-efficacy. Furthermore, the results also indicated that programming skills and Java constructs have higher influence on the self-efficacy for Java programming among computer science education students followed by non-complexity, time consciousness, ability to recode for better understanding and self-motivation.

Keywords: Java Programming, Self-efficacy, Computer Science Education Students

**Discipline of Computer Science Education, University of KwaZulu-Natal, Pinetown, Durban, South Africa*

***Faculty of Educational Sciences, University of Quebec at Montreal, Montréal, Quebec, Canada*

1 Introduction

Self-efficacy is "people's judgments of their capabilities to organize and execute courses of action required in attaining designated types of performance" (Bandura, 1986: 391). Self-efficacy plays a crucial role in the psychological construct and therefore requires attention from research as it influences "(i) the choice of activities that an individual takes part in; (ii) the amount of effort they will expend in performing a task and (iii) how long they will persevere in the face of stressful situations in completing that task (Bandura, 1977). Bandura studies (1977 and 1986) indicated that individual self-efficacy is an important factor for the performance over a wide range of situations. Askar and Davenport (2009), Aşkar and Umay (2001), Bandura, Adams, and Beyer (1977), Wiedenbeck (2005) indicated self-efficacy beliefs of individuals perceive themselves as capable of performing certain tasks or activities. Furthermore, these researchers indicated that individuals with low self-efficacy beliefs, perceived themselves less capable and less likely to attempt certain tasks or activities. According to Zimmerman (2000), educational researchers have accepted that improving students' self-beliefs about their academic capabilities

does play an important role to improve their academic performance.

According to Askar and Davenport (2009), "Self-efficacy is especially important, and potentially useful, when the context relates to education. This is because the theory recognizes an individual's actual performance being influenced by their self-efficacy, hence this can affect any further performance. The theory suggests that individuals based their self-efficacy beliefs on four sources of information: i) personal experience of the skills, ii) vicarious experience-seeing people similar to oneself, perform the skills, iii) verbal persuasion, and iv) somatic and emotional states - fear, stress, also fatigue, aches and pains, etc."

According to Gist and Mitchell (1992), the main concept of the malleability is very important for the self-efficacy theory since it poses the potential to improve people's performance via increased self-efficacy. Several researchers indicated that efficacy beliefs have shown to be malleable, in the case of early stages of skill development (Bandura, 1994; Bandura, 1997; Bandura, 1986; Torzadeh and Koufteros, 1994). "Too much malleability would not be desirable, if it led to steep drops in self-efficacy based on a single poor outcome. While intellectual

ability and domain knowledge are major factors in achievement in educational settings, perceived self-efficacy also plays a strong role. Those with the same level of cognitive skill development vary in their intellectual performance depending on the strength of their self-efficacy beliefs" (Zimmerman, 1995).

2 Problem statement

According to Fang (2012), Garner (2009) and Nilsen and Larsen (2011), students experience programming difficulties with the content and algorithmic structure of the programming because of low self-efficacy and motivation. Garner (2009) indicated that learning computer programming bears a considerable cognitive load on students. Several researchers (Korkmaz, 2013; Nilsen and Larsen, 2011; Caspersen and Kolling 2009; Bergin and Reilly 2005; Dreyfus and Dreyfus, 1986) indicated that students usually perceived computer programming courses as one of the most difficult courses as learning to program is perceived as a difficult task, compared to the other subjects, high drop-out and the failure rates are very common. In this relation, learning computer programming requires the process of acquiring skills which are considered difficult and requires a great amount of effort. According to Gomes and Mendes (2007), many problems are related to the acquiring of computer programming skills for academic success and the level of student's satisfaction. Studies by Tan et al. (2009) stated that during the learning phase of computer programming, difficulties faced by students contributes directly to the development of the negative perception on computers as a discipline. This phenomenon is usually caused by a sense of misjudgement among students, that learning and acquiring a competence in programming is a highly difficult process. However, as a consequence, students unconsciously reject the process of learning programming. Furthermore, their studies also indicated it is a crucial task to determine beforehand, students' perception of programming and take countermeasures to tackle and address the problems associated with these perceptions.

3 Research question

What factors affect computer science education students Java programming self-efficacy?

4 Aim and objectives

The aim of this study is to evaluate the impact of factors that affect computer science education students' Java programming self-efficacy. This aim is achieved through the following specific objectives:

- To identify the self-efficacy factors influencing computer science education students Java programming;

- To analyse the impact of self-efficacy factors on computer science education students Java programming;

- To examine the activities and strategies that universities should take in order to improve the levels of satisfaction among computer science education students of their Java programming self-efficacy.

5 Literature review

A study was conducted by Korkmaz and Altun (2014) on engineering student's C++ computer programming self-efficacy levels and their sample size of the study consisted of 378 engineering students. The results of the study indicated that the scale is reliable and valid, and it can be used for the measurement of self-efficacy of engineering students in a Turkish cultural environment. Furthermore, their study also indicated that self-efficacy perception of students in computer engineering is found to be higher than that of the students in electrical-electronic engineering. Ramalingam and Wiedenbeck (1998) conducted a study and their research results indicated that differences in self-efficacy between the pre-test and the post-test was usually found among students with low self-efficacy. Moreover, their studies also indicated that no substantial difference was found between males and females.

Studies conducted by Anastadiadou and Karakos (2011), Erdogan et al., (2008), Sacks et al., (1993), and Austin (1987) indicated that several factors affects the success for learning , but it is generally accepted that attitude and self-efficacy perception are the most important factors among others. Research results from Levine and Donitsa-Schmith (1998) indicated that computer competence and computer literacy are not just related to level of knowledge, constraints, applications, and effect of the computer but, at the same time, it is directly related to the individual's attitudes towards the computer.

According to Askar and Davenport (2009), self-efficacy directly affects the process of acquiring new skill and using a new skill. They also stated that self-efficacy can be used as a tool and a reliable one in order to predict a person's performance. Furthermore, their studies indicated that self-efficacy of the students were influenced by their computer experience and their computer skills. Moreover, their studies stated that students' gender and the family usage of computers did not affect students' self-efficacy (Askar and Davenport, 2009). Studies by Ramalingam, La Belle, and Wiedenbeck (2004) stated that previous programming experience has an influence on programming self-efficacy.

A study was conducted by Jegede (2009) in a university in Nigeria on engineering students' Java programming self-efficacy with students' programming experience. The research results indicated that there is a relationship between the students' Java programming self-efficacy and each of

the computer use and programming experience factors. Wiedenbeck (2005) presented a view on the self-efficacy as a factor of success when comparing students at the same level of the cognitive skills development, a student with higher self-efficacy beliefs is more likely to take on more advanced progressive challenges and finally will strive harder to reach the goals. Furthermore, Wiedenbeck (2005) and Askar and Davenport (2009) also indicated that with the low self-efficacy beliefs an individual tends to exaggerate problems and undergo stress and depression that can make a solvable problem impossible. According to Cassidy and Eachus (2002), higher levels of perceived self-efficacy correlate to generate the motivational efforts and the perseverance. Askar and Davenport (2009) stated that self-efficacy has emerged as an important means of understanding the predicting of a person's performance. On the other hand, according to Jegede (2007), higher levels of computer self-efficacy correspond to greater achievement of computer competence.

According to Korkmaz (2011), a person's self-efficacy perception is the self-evaluation of his or her competence to conduct the task successfully. Furthermore, it is considered a prediction of a person's aptitude for what he or she can accomplish, in terms of his or her competence in order to complete a particular task. Moreover, a person can have all the necessary qualities to complete a task, but the deficiency in self-belief and lack of motivation can raise a failure. Further, Asker and Davenport (2009) indicated that self-efficacy has the direct effect to process a new acquiring skill. In this connection, the level of the self-efficacy can be used as a tool and a reliable indicator in terms of a person's performance.

6 Methodology

The underlying research design is based on the use of validated questionnaires from Ashkar and Davenport (2009). Collected data were analyzed using SPSS version 22.0. The next section discusses these questionnaires and their measurements.

6.1 Sample and procedure

This study was experimental and conducted within a public university in KwaZulu-Natal, South Africa.

The sample consisted of 20 computer science education students. Each participant's participation was purely voluntary and they were assured of anonymity. The questionnaire, which is described in more detail in the following section, was administered to participants in the first week to the second week of May 2015.

6.2 Questionnaire

The questionnaire was developed to capture information relevant to the study and consisted of two parts. Part One sought information on factors affecting, Part Two consisted of questions regarding demographics. Each participant was allocated 20 minutes to fill the questionnaire. There was a total of 34 questions in the survey. In 31 of the questions, the students were asked to answer (on a scale 1 to 7) how well they think they meet five specific course goals of the introductory programming course:

- a) Analyze and design solutions for simple problems
- b) Formulate a strategy for managing the larger problems
- c) Systematic debugging
- d) Read, understand and modify the small parts of large amounts of code written by others
- e) Explain general principles for how a computer is structured and operates

Three of the questions asked were for gender, programming experience and what student group they belonged to.

7 Results

7.1 Demographics

Demographics consist of three items, namely, age, gender, and year of study. All the three items have been explained below with tables and graphs.

7.1.1 Age

Table 1 shows that all the respondents are between 20 to 30 years old. A graphical representation of this distribution is depicted in Figure 1.

Table 1. Age frequency distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30 years	20	100.0	100.0	100.0

7.1.2 Gender

Table 2 and Figure 2 represents that more than half of the respondents (55%) are female. On the other hand, 45% of the respondents are male. A graphical

representation of this distribution is depicted in Figure 2.

Figure 1. Age distribution

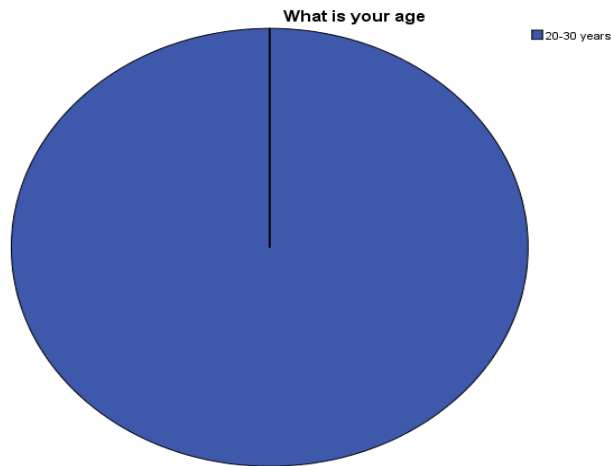
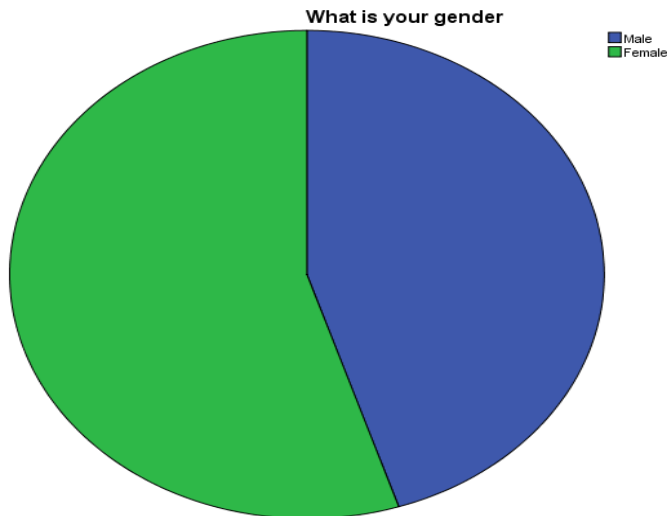


Table 2. Gender frequency distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	9	45.0	45.0	45.0
	Female	11	55.0	55.0	100.0
	Total	20	100.0	100.0	

Figure 2. Gender distribution



7.1.3 Year of study

Table 3 and Figure 3 represents that half of the respondents were from the level of study 310 and half

of the respondents were from the level of study 410. A graphical representation of this distribution is depicted in Figure 3.

Table 3. Year of study frequency distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	310	10	50.0	50.0	50.0
	410	10	50.0	50.0	100.0
	Total	20	100.0	100.0	

Figure 3. Year of study distribution



8 Reliability

Reliability testing of the questionnaire data was done by calculating Cronbach's coefficient alpha (α) for each Likert scale based section of the questionnaire. Data from the questionnaire was reliable because the Table 4 shows that the Cronbach's Alphas is 0.973 for the 32 items.

Table 4. Cronbach's Alpha

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.973	.973	32

9 Mean and standard deviation of self-efficacy

Mean and standard deviations of the self-efficacy scores of all the 32 items are given in Table 5. There was a significant difference between each item of the questions of the self-efficacy for Java programming.

10 Rotated component matrix

The researchers also performed the testing of the overall validity of the questionnaire data by factor analyzing all the reliable and valid items from the Likert scale based on variables and the results was as follows:

- Number of items 32
- Number of components extracted is 6

Table 6 shows the rotated matrix of the reliable and valid items from the Likert scale based variables. The extraction of six components of this factor analysis confirms that the Likert scale based variables of the questionnaire are indeed valid to represent all the variables. Six components are namely programming skill (component 1), Java constructs

(component 2), non-complexity (component 3), time consciousness (component 4), ability to recode for better understanding (component 5) and self-motivation (component 6).

In the case of programming skill (component 1), Table 6 shows that out of 32 items only four items, namely Q9 (.754), Q10 (.877), Q12 (.713), and Q27 (.777) have significantly influenced students in the computer science education discipline in terms of self-efficacy for Java programming. *In the case of Java constructs (component 2)*, Table 6 shows that out of 32 items only four items, namely Q2 (.800), Q7 (.866), Q14 (.878), and Q15 (.890) have significantly influenced students in the computer science education discipline in terms of self-efficacy for Java programming. *For the non-complexity (component 3)*, Table 6 shows that out of 32 items only three items, namely Q4 (.912), Q5 (.883), and Q6 (.793) have significantly influenced students in the computer science education discipline in terms of self-efficacy for Java programming. *For the time consciousness (component 4)*, Table 6 shows that out of 32 items, only two items, namely Q23 (.855) and Q24 (.818) have significantly influenced students in the computer science education discipline in terms of self-efficacy for Java programming. *In the case of time consciousness (component 5)*, Table 6 shows that out of 32 items only one item, namely Q30 (.760) have significantly influenced students in the computer science education discipline in terms of self-efficacy for Java programming. *Finally, in the case of Self-motivation (component 3)*, Table 6 shows that out of 32 items only one item, namely Q31 (.908) have significantly influenced students in the computer science education discipline in terms of self-efficacy for Java programming. Among all six components only first two components have the highest influence on the self-efficacy for the Java programming followed by component 3, component 4, component 5 and component 6.

Table 5. Mean and standard deviation of self-efficacy according to questionnaire items

Item Statistics			
	Mean	Std. Deviation	N
Q1	5.50	.946	20
Q2	5.25	1.293	20
Q3	5.30	1.081	20
Q4	6.40	.754	20
Q5	6.00	1.451	20
Q6	5.70	1.418	20
Q7	5.05	1.317	20
Q8	4.45	1.761	20
Q9	5.85	1.348	20
Q10	5.05	1.538	20
Q11	5.10	1.651	20
Q12	4.80	1.704	20
Q13	4.75	1.333	20
Q14	5.60	1.536	20
Q15	5.40	1.392	20
Q16	5.75	1.020	20
Q17	5.20	1.005	20
Q18	4.50	1.357	20
Q19	5.40	1.095	20
Q20	5.15	1.309	20
Q21	5.55	1.504	20
Q22	5.55	1.050	20
Q23	5.55	1.099	20
Q24	5.40	1.095	20
Q25	5.00	1.214	20
Q26	4.50	1.318	20
Q27	4.80	1.473	20
Q28	4.40	1.046	20
Q29	4.00	1.376	20
Q30	4.55	1.317	20
Q31	4.90	1.483	20
Q32	5.00	1.170	20

Table 6. Rotated matrix for the six Likert scale based variables

Rotated Component Matrix						
	Component					
	1	2	3	4	5	6
Q1	.474	.589	.495			
Q2		.800				
Q3	.510	.461	.470			
Q4			.912			
Q5			.883			
Q6			.793			
Q7		.866				
Q8		.608				
Q9	.754					
Q10	.877					
Q11	.672					
Q12	.713	.469				
Q13	.508	.612				
Q14		.878				
Q15		.890				
Q16	.490					
Q17	.688					
Q18	.638	.474				
Q19	.571					
Q20	.472	.548		.466		
Q21						.587
Q22					.613	
Q23				.855		
Q24				.818		
Q25	.682			.520		
Q26	.534					.520
Q27	.777					
Q28	.699					
Q29					.689	
Q30					.760	
Q31						.908
Q32	.518				.493	

11 Conclusion and discussion

The aim of this study was to investigate predictors of Java programming language, self-efficacy among computer science education students. This study focused on the relationship between Java programming, self-efficacy beliefs, as well as age and gender. Our results indicated that programming skills and Java constructs have high influence for Java programming in computer science education students followed by non-complexity and time consciousness. Students were less confident on the ability to recode for better understanding and self-motivation since only one item contributed to the factor.

Overall, our initial results confirm that the relevance of self-efficacy to the acquisition of programming skills, Java constructs, non-complexity, time consciousness, ability to recode for better understanding, and self-motivating is in line with Bandura’s theory. However, consistent with the

previous findings, the present study of computer science education students supports existing literature on taking a programming course before significantly predicting students’ programming self-efficacy (Ramalingam and Wdidenback, 1998; Weidenback, 2005; Askar and Davenport 2009).

On the contrary, Jegede (2009) found years of computing experience did not predict Java self-efficacy. However, we can say that the programming course experience continues to affect students’ self-efficacy until the end of the year. Furthermore, even at the end of the semester, reading and understanding Java programming seems to be challenging for the students who have never taken any programming course before.

12 Limitations

Although this study is limited by the time limits under which it was carried out, the preliminary results show

that there is a strong influence with programming skills, Java constructs, non-complexity, time consciousness, ability to recode for better understanding, and self-motivation for self-efficacy of Java programming in computer science education students. For future studies, it would be very interesting to carry out the longitudinal study where one can follow the same group of students rather than asking students from two different years with regard to their self-efficacy beliefs. Some difficulties have been experienced because Java programming was new for most of the students in the 310 level. The study, of university level students, concentrated on the predictors that determine a participant's Java programming self-efficacy beliefs rather than their effects on academic achievement. It would also be interesting to relate Java programming self-efficacy to students' actual academic achievement.

References

1. Anastadiadou, S. D. and Karakos, A. S. (2011), "The beliefs of electrical and computer engineering students' regarding computer programming", *The International Journal of Technology, Knowledge and Society*, Vol. 7, No. 1, pp. 37-51.
2. Aşkar, P. and Umay, A. (2001), "Perceived computer self-efficacy of the students in the elementary mathematics teaching programme", *Journal of Hacettepe University Education Faculty* 21, pp. 1-8.
3. Askar, P. and Davenport, D. (2009), "An investigation of factors related to self-efficacy for java Programming among engineering students", *The Turkish Online Journal of Educational Technology*, Vol. 8, No. 1, pp. 26-32.
4. Austin, H. S. (1987), "Predictors of pascal programming achievement for community college students", *Proceedings of the eighteenth SIGCSE technical symposium on computer science education*, Missouri, United States, pp. 161-164.
5. Bandura, A. (1977), "Self-Efficacy: Toward a unifying theory of behavioural change", *Psychological review*, Vol. 84, No. 2, pp. 191-215.
6. Bandura, A. (1986), *Social Foundations of Thought and Action*, Prentice hall, Englewood Cliffs, NJ.
7. Bandura, A. (1994), Self-efficacy. In V.S. Ramachaudran (Ed.), *Encyclopedia of Human Behavior*, Vol. 4, Academic Press, NY, 71-81.
8. Bandura, A. (1997), *Self-efficacy: The exercise of control*. W. H Freeman, NY.
9. Bandura, A. Adams, N. E. and Beyer, J. (1977), "Cognitive processes mediating behavioral change", *Journal of Personality and Social Psychology*, Vol. 35, No. 3, pp. 125-139.
10. Bergin, S., and Reilly, R. (2005), *The Influence of Motivation and Comfort-level on Learning to Program*, In University of Sussex, Brighton, UK.
11. Caspersen, M. E., and Kolling M. (2009), *STREAM: A First Programming Process*. ACT Transaction on Computing Education, 9, 1-29.
12. Cassidy, S., and Eachus, P. (2002), "Developing the computer User Self-Efficacy (CSUE) Scale: Investigating the Relationship between Computer Self-Efficacy, Gender and Experience with Computers", *Educational Computing Research*, Vol. 26, No. 2, pp. 133-153.
13. Dreyfus, H., and Dreyfus, S. (1986), *Mind Over Machine: The Power of Human Intuition and Expertise in the Era of the Computer*, New York: Free Press.
14. Erdogan, Y., Aydin, E., and Kabaca, Y. T. (2008), "Exploring the psychological predictors of programming achievement", *Journal of instructional psychology*, Vol. 35, No. 3, pp. 264-270.
15. Fang, X. (2012), "Application of the participatory method to the computer fundamentals course, Affective Computing and Intelligent Interaction", *Advances in Intelligent and Soft Computing*, 137, pp. 185-189.
16. Garner, S. (2009), *Learning to Program from Scratch*, 9th IEEE Int. Conference on Advanced Learning Technologies, 451-452, Doi: 10.1109/ICALT.2009.50.
17. Gist, M. E., and Mitchell, T. R. (1992), "Self-efficacy: A Theoretical Analysis of Its Determinants and Malleability", *Academy of management review*, Vol. 17, No. pp. 183-211.
18. Gomes, A. and Mendes, A. J. (2007). "Learning to program-difficulties and solutions. International conference on engineering education, ICEE. 3-7 Temmuz, Coimbra, Portugal. Available at <http://ineer.org/Events/ICEE2007/papers/411.pdf>
19. Jegede P.O. (2007), "Factors in computer Self-Efficacy among South-Western Nigeria College of Education", *Teachers Journal of Psychology in Africa*, Vol. 17, No. 1.
20. Jegede, P. O. (2009), "Predictors of Java programming self-efficacy among engineering students in a Nigerian university", *International Journal of Computer Science and Information Security*, 4 (1&2).
21. Korkmaz, Ö. (2011), "Study of validity and reliability of self-efficacy scale of teaching material utilization", *Educational research review (ERR)*. Vol. 6, No. 15, pp. 843-853. Doi: 10.5897/ERR11.174
22. Korkmaz, Ö. (2013), "Students' difficulties in an opinions about designing algorithms according to different instructional applications", *Energy education science and technology Part B: Social and Educational Studies*, Vol. 5, No. 1, pp. 209-218.
23. Korkmaz, Ö. and Altun, H. (2014), "Adapting computer programming self-efficacy scale and engineering students' self-efficacy perceptions", *Participatory Educational Research (PER)*, Vol. 1, No. 1, pp. 20-31.
24. Levine, T., and Donitsa-Schmidt, S. (1998), "Computer use, confidence, attitudes, and knowledge: a causal analysis", *Computers in Human Behavior*, Vol. 14, No. 1, pp. 125-146.
25. Nilsen H. and Larsen A. (2011), "Using the personalized system of instruction in an introductory programming course", *NOKOBIT*, 27-38. November 21-23.
26. Ramalingam, V. and Wiedenbeck, S. (1998), "Development and validation of scores on a computer programming self-efficacy scale and group analysis of novice programmer self-efficacy", *Journal of Educational Computing Research*, Vol. 19, No. 4, pp. 367-386.
27. Sacks, C., Bellisimo, Y., and Mergendoller, J., (1993), "Attitudes toward computers and computer use: the issue of gender", *Journal of Research on Computing in Education*, Vol. 26, No. 2, pp. 257-269.

28. Tan, P.H. Ting C.Y. and Ling, S.W. (2009), "Learning difficulties in programming courses: undergraduates' perspective and perception", International Conference on Computer Technology and Development, pp 42-46. DOI: 10.1109/ICCTD.2009.188
29. Torkzadeh, G., and Koufteros, X., (1994), "Factorial validity of a computer self-efficacy scale and the impact of computer training", Educational and psychological measurement, Vol. 54, No. 3, pp. 813-821.
30. Wiedenbeck, S. (2005), "Factors affecting the success of non-majors in learning to program", Proceedings of the first International Workshop on Computing Education Research, Seattle, pp. 13-24.
31. Zimmerman, B. J. (2000), "Self-efficacy: An essential motive to learn", Contemporary Educational Psychology, Vol. 25, No. pp. 82-91.
32. Zimmerman, B. J. (1995). Self-Efficacy and educational development in self-efficacy in changing societies, A. Bandura (ed.) Cambridge University Press, Cambridge, pp. 203-231.

A STUDY OF SMALL, MEDIUM, AND MICRO-SIZED ENTERPRISE (SMME) BUSINESS OWNER AND STAKEHOLDER PERCEPTIONS OF BARRIERS AND ENABLERS IN THE SOUTH AFRICAN RETAIL SECTOR

*Mlenga G Jere**, *Albertina K Jere***, *Jonathan Aspeling***

Abstract

Despite the support extended to the small business sector in South Africa, the growth and survival rates of small, medium, and micro-sized enterprises (SMMEs) are lower than expected. This paper investigates business owner and stakeholder perceptions of barriers and enablers of the start-up, survival, and growth of SMMEs in the South African retail sector. A qualitative research design using semi-structured interviews was employed for data collection from samples of stakeholders and business owners. Framework analysis was used to analyse both sets of data. The findings show that the stakeholders and business owners consider the lack of support, competition, skills shortages, and poor internal controls as the key barriers to the start-up, survival, and growth of SMMEs. Stakeholders considered the business environment as the key enabler while the business owners regarded increasing demand as the key enabler. To address the barriers, recommendations relating to skills development, funding, shelter and services, and other business development resources are presented***.

Keywords: South Africa, Retail Sector, Barriers, Enablers, Informal Businesses, SMME

*Graduate School of Business, University of Cape Town

**Department of Retail Business Management, Cape University of Technology

***Funding for this study was provided by the Wholesale and Retail Leadership Chair (Project 2013-02), Cape Peninsula University of Technology, South Africa.

1 Introduction

According to the South African *Financial Mail* (13 June, 2013), despite the many support programs in place, the growth and survival rates of small businesses in South Africa is lower than expected. Evidence suggests that South Africa's performance in entrepreneurial and business activity ranks below average (Herrington et al., 2010). The *Financial Mail* article goes further to proffer a number of reasons that could account for the poor state of affairs regarding the growth and survival rates of small businesses in South Africa. These reasons include that the needs of small, medium, and micro-sized enterprises (SMMEs) are ignored, good programs are working at a small scale for impact, resources are channelled to ineffectual programs, the high burden of compliance with both local and national regulations, and rising operating costs. Still others are unfavourable labour laws, red tape, uncertainty regarding the supply of services, unfavourable economic conditions, poor or lack of access to business advisory services and finance, uncoordinated SMME support programs, and lack of skills. The *Financial Mail* article demonstrates that the issue of SMME development is topical and important in South Africa. This paper aims to take this

discussion further by addressing the issue of SMMEs with a focus on informal and SMME retailers in South Africa. More specifically, the paper seeks to identify the factors that impact on the start-up, survival and growth of SMMEs including informal small businesses, by answering the following question from the point of view of SMME business owners and stakeholders in organisations involved in SMME development: What are the external and internal barriers to, and enablers of, the start-up, survival and growth of SMMEs?

The inclusion of informal small businesses in this paper is important because the informal sector is a major factor in developing countries such as South Africa (Ligthelm, 2013). Informal businesses exist in almost all economies, but they are a major contributor in emerging and transition economies. The size of the informal sector varies across countries but ranged from, for example, 9%, 15%, 29%, 34%, and 60% of GDP in 1999/2000 for the US, Canada, South Africa, Kenya, and Zimbabwe respectively (Khavul, Bruton and Wood, 2009). Though the informal sector includes a wide variety of activities, this paper focuses on those involved in the retail sector. According to the FinScope South Africa Small Business Survey, which is a "comprehensive, nationally representative survey"

(Finmark Trust, 2010:1) that describes the size and scope of the small business sector amongst other objectives, about 79% of small business activities involve an element of retailing. The retail sector is therefore an important participant in the economy having a significant impact on both the formal and informal sectors (Morris, Pitt and Berthon, 1996). Informal retail trade dominates the informal sector and is estimated to contribute more than 70% of total informal sector output (Rolfe et al., 2010).

2 Literature review

2.1 Role of retail SMMEs

In addition to the traditional role of supplying goods and services to consumers and employment generation; SMMEs play a variety of other roles including providing diversity, colour and choice in a sector which is becoming increasingly standardised in terms of the format and product offerings (Smith and Sparks, 2000). Retail businesses also play a significant social role in the communities they serve (Coca-Stefaniak et al., 2010; Schmidt et al., 2007; Bennison and Hines, 2003; Smith and Sparks, 2000). Smith and Sparks (2000: 205) found that small retail shops "...have provided a sense of location and locale and have often been identified with 'ways of life' and social and community infrastructures." This alludes to retail SMMEs providing a sense of identity and being the focus for interaction of community members without which social exclusion and isolation, particularly for the poorer community members, would spread (Schmidt et al., 2007). The growth of large out-of-town shopping centres, it is argued, results in a poor shopping environment and social exclusion of consumers with limited mobility, including the aged and low-income households. This has led to governments recognising the role of retail SMMEs and local retailing when addressing the concerns around social inclusion (D'Andrea et al., 2006; Schmidt et al., 2007). Retail shops contribute not only to community preservation, but also to serving the specific needs of their customers with whom they have personal relationships (Schmidt et al., 2007; Bennison and Hines, 2003; Smith and Sparks, 2000). Depending on their location, retail SMMEs may also be the only place where purchases can be made, or they may be the only providers of specialised goods and/or services (Smith and Sparks, 2000). For retail SMMEs to be seen to be playing this role, they have to be embedded in the community and have a sense of belonging therein, which goes beyond merely being located in a particular area, and running their business to become a part of the community fabric (Coca-Stefaniak et al., 2010).

2.2 Success factors and challenges in the retailing environment

The retailing environment is very competitive. Viability therefore depends on the firms having a clear understanding of the challenges and opportunities presented by the retail environment. To succeed in the retail sector, retailers must offer compelling value propositions and be responsive to market dynamics. As a way to influence consumer perceptions of value, Grewal et al. (2010) suggest that retailers must manage six levers of retail success, namely; store factors, service factors, merchandise factors, price factors, supply chain factors, and technology factors. Store factors are concerned with the combination of retail format and retail environmental factors. Store factors are important as a lever of retail success because customers consider both the functional benefits and the overall experience offered by the physical store. Differentiation based on retail atmospherics is one way retailers add value to the shopping experience and, therefore, influence store patronage intentions. Environmental cues such as music, colours, and people are examples of factors that affect consumer experiences (e.g., Baker et al., 2002).

Service factors are concerned with how much attention is paid to customer service and are a key driver of retail success. Service factors can provide a significant source of competitive differentiation. An important service factor is convenience; which may be one, or a combination of, decision, access, transaction, benefits, or post-benefit convenience. The third lever of retail success is merchandise. Merchandise management as a lever of retail success involves finding and stocking merchandise which meet the targeted consumers' needs; and ensuring that adequate stock of the appropriate merchandise is available when and where it is required by customers. Price is a further lever of retail success and should be based on the value of what is being offered in the mind of the targeted customers. Retail success is in part dependent on the extent to which retailers understand what the customer will give up in exchange for their offerings. Important aspects of price include the monetary price, the time, and the effort the customers give up to acquire the product. The fifth lever, supply chain management, involves the efficient and effective integration of manufacturers, suppliers, warehouses, stores, and transportation companies to ensure that the right products and quantities reach the customer at the right price and service level. Finally, the use of appropriate technology at any level in the supply chain can contribute to retail success. Retailers that employ appropriate technology are more likely perform well and be competitive because they are able to collect and use sales data and manage their inventory using this technology (Grewal et al., 2010).

2.3 Challenges facing retail SMMEs

According to Grewal et al. (2010), retailers face many challenges, including consolidation, value, innovation, and cost control. The latter three are more relevant to this paper. Value is a major ingredient in retail sustainability. To succeed, retailers have increasingly to rely on the provision of better value than their competitors. This also applies to retailers serving low-income consumers as well as informal retailers. Innovation is increasingly employed to enhance customer service-levels. This simply means finding better ways of maximising the customer shopping experience. For example, cooperative buying by small retailers to take advantage of quantity discounts could give them a competitive edge and add to the customers' shopping experience as well as the bottom line. Finally, retailers, especially those serving low-income consumers need to be efficient and effective managers of their value chains to minimise system-wide costs in order for them to meet their customers' service and price requirements (Grewal et al., 2010). According to Dawson (2000), challenges faced by retail managers include the need to grow continually, the changing nature of brands, the imminent overcapacity of retail space, the turbulent and changing retail environment, balancing the externalisation and internalisation of functions, and the impact of e-retailing.

The challenges faced by small business retailers include high crime rates; inadequate business/management training; progressive degradation of ageing or inadequate urban infrastructure; individualism and lack of a single lobbying voice for influencing policy; distrust and cynicism towards local authorities; and, rapidly changing consumer behaviour (Parker and Byrom, 2000; Hallsworth and Warnaby, 2003 cited by Coca-Stefaniak et al., 2010). A major challenge facing SMMEs is the growing competitiveness resulting in market concentration. This trend has posed a serious threat to the existence of SMMEs. Lee et al. (2008) state that at least one third of new retailers in the USA do not survive their first year of operation; most of the 'casualties' are SMMEs. Howe (1992) identified the crowding out of retail SMMEs in central business districts by large retailers as a threat, particularly to 'mom and pop' stores in the UK. Other studies have found a similar trend in the decline of retail SMMEs both in Europe and the USA due to increased competition from larger retailers (Coca-Stefaniak et al., 2010; Schmidt et al., 2007).

The high levels of market concentration have resulted from the phenomenon of a relatively small number of chain retailers with better access to resources, which enjoy economies of scale and consequently compete more favourably (Schmidt et al., 2007). This threat to SMMEs has been intensified by large retailers venturing into niches which have traditionally been the preserve of small retailers such

as convenience stores, as well as having long operating hours; thus rendering the neighbourhood corner stores redundant (Schmidt et al., 2007). Furthermore, the proliferation of large surface retailers and shopping malls which offer customer convenience through the combination of diverse shopping options, such as leisure and entertainment, have drawn customers away from neighbourhood retail SMMEs. The multiple-store threat to retail SMMEs also has supply-chain implications. The increasing size of chain retailers gives them more control over the supply chain, which works to the detriment of the smaller retailers (Waters, 1999).

Logistics and supply also challenge retail SMMEs. A common logistical challenge that retail SMMEs face relates to distributor minimum-order sizes that are in excess of the SMME inventory requirements. Increased inventory levels result in relatively higher operating costs, rendering SMMEs less competitive compared to the larger retailers (Schmidt 2007; Smith and Sparks, 2000). This constraint points to one of the internal weaknesses of SMMEs, namely the limited financial resources for both capital as well as working capital expenditure. SMME retailers may not be able to afford to invest in capital assets such as point-of-sale technology to give them competitiveness. Limited managerial skills and succession problems are a further internal weakness. Business and technical skills are among the constraints faced by microenterprises in emerging markets (Palakurthi and Maddocks, 2006).

In the context of emerging markets, Okpara and Wynn (2007) identified the main barriers faced by SMMEs in Nigeria to be lack of financial support, management experience, infrastructure, and training, as well as corruption and inadequate bookkeeping and recording. A subsequent study in Nigeria identified similar barriers including lack of financial support, poor management, corruption, poor infrastructure, and a demand for products and services (Okpara and Kabongo, 2009). Another emerging market study in India found that the major barriers for small businesses included working capital, power shortages, equipment, and management (Coad and Tamvada, 2012). A study of the barriers encountered at start-up for micro and small business in England found that the major barriers included financial difficulties (i.e., a lack of investments in new businesses and a lack of adequate support and acknowledgement of the challenges faced by new small businesses. In addition, there was a lack of flexibility from financial institutions and large organisations. This study also identified the major enabler to be the employment of mentors and provision of ongoing specific advice by service providers (Fielden, Davidson and Makin, 2000).

It is evident from the literature review that SMMEs, which are predominantly retail-based, face many internal and external challenges, ranging from poor business management skills to changing

consumer behaviour and increasing competition. However, it is also evident that there are enablers or opportunities available to SMMEs, including provision of goods and services to consumers; flexibility relative to big business; collective bargaining or unionisation; informal financing from social networks; opportunity to provide for oneself and family; development of entrepreneurship skills and confidence; partial access to additional income; and, limited use of start-up capital (Willemse, 2011). The Department for Business Innovation and Skills (2013) of the United Kingdom summarises the key enablers of businesses success for SMMEs into three broad clusters, namely internal capacity and capability to grow, the external environment including the market, and the vision of the business owners regarding growth.

Other researchers including Cant and Ligthelm (2002), Dockel and Ligthelm (2002) and Storey (1994) have approached the question of impediments to, and enablers of, SMMEs by investigating the determinants of success. According to Cant and Ligthelm (2002), important determinants of small business success include: marketing-related factors (e.g., increased competition, limited market size, ineffective marketing, lack of knowledge of competitors, and poor location), financial factors (e.g., problems in sourcing finance, high operating expenses, consumer credit management, poor cash flow management, and lack of financial planning), human resources factors (e.g., new labour laws, inability to attract and retain suitable staff, low labour productivity, poorly trained employees, and high

labour turnover), management factors (e.g., adapting to changing business environment, time management, delegation and cooperative management, planning and prioritising, and effective control), and macro-environmental factors (e.g., crime and corruption, inflation, unemployment, interest rates, and exchange rates). Dockel and Ligthelm (2002) identified the main factors that differentiate successful business from unsuccessful ones as the following: the reason for starting a business; access to infrastructure; place of business; period in business; type of involvement (full-time or part-time) in business; size; financing; and, demographic factors (e.g., owner qualifications, age, population group). For Storey (1994), three dimensions need to be combined and optimised in order for small businesses to grow: the entrepreneur's starting resources (e.g., motivation, education, gender, prior business failure); the business enterprise (e.g., age, sector, location, size); and the strategy (e.g., state support, information and advice, market positioning, planning).

2.4 Small businesses in South Africa

SMME development is one of the South African government's priority areas (Ligthelm, 2013; Rogerson, 2013) with various programmes in place to support small business development. The nature of small businesses in South Africa covers a wide spectrum of activities; but, as shown in Table 1, about 79% of the business activities involve an element of retailing, whether or not the businesses perform other activities such as growing or making what they sell.

Table 1. Nature of small businesses

Business activity	% of small business owners
<i>Retailing activities</i>	78.7
Sell something in the same form it was bought	48.8
Buy something to sell, but add value before reselling	10.7
Grow something to sell	5.2
Make something to sell	5.1
Sell by-products of animals	3.7
Rear livestock/poultry and sell	3.1
Sell something that was collected from nature	1.5
Sell something that was obtained for free	0.6
<i>Service provision activities</i>	21.3
Render a skilled service, e.g., mechanic, plumber, hairdresser	13.2
Render other services, e.g., car wash, garden services, transport (taxi services), catering	5.1
Render a professional service, e.g., doctor, lawyer, accountant	1.3
Render building/construction services	1.0
Render tourism-related services, e.g., accommodation/hotel/Bed and Breakfast/guest house, tour operators	0.6
<i>Total</i>	100.0

Source: Finmark Trust (2010): 8

Based on the business owners' claims, only 8.3% of the small businesses in South Africa are formally registered (Finmark Trust, 2010); suggesting the

majority of small businesses are unregistered and therefore, informal. Though there is no convergence on what exactly constitutes the informal sector,

Ligthelm (2013: 59) explained that “the informal sector is collectively defined as small unregistered businesses operating as street vendors and in-home businesses established on residential sites (often termed as ‘spaza shops’ or ‘tuck shops’ in South Africa)”. Schneider (2005: 600) defines economic informality as “all market-based legal production of goods and services that are deliberately concealed from public authorities” to highlight that informal businesses do not necessarily engage in criminal activity. The concealment is meant to circumvent taxation, labour laws, and administrative regulations. Therefore, though the goods and services traded in the informal sector are not illicit, their production and distribution may be illicit (Portes and Haller, 2005); and although informality tends to lower the immediate cost of doing business (e.g., no registration or licencing fees, no tax and tax administration, and no labour law compliance), it has long-term costs for the small businesses (e.g., no business bank accounts and no formal business track record). For Pretes (2002), informal businesses are those that have fewer than five employees, are not registered or licensed and do not typically pay tax. This is in contrast to small formal businesses which are defined as “businesses operating from fixed building structures located on business stands demarcated as such by local government (municipal) town planning regulations” (Ligthelm, 2013: 59). The limited consensus on what constitutes the informal sector, or how to measure its impact accurately (Yu, 2012), leads to large reporting discrepancies in the levels of activity in the informal sector. By definition, informal businesses are largely unrecorded (Ligthelm, 2004), hence the dearth of reliable statistics on the informal sector. Though difficult to study, it is essential to understand informal businesses because of the significant role they play in creating employment and sustaining livelihoods.

Despite one in five of the South African business owners surveyed in the Finscope Survey responding that there were no obstacles to growing their businesses, a wide range of obstacles were also identified including: space to grow (16.2%), competition (12.6%), access to finance (8.7%), crime and theft (6.6%), cost of finance (5.2%), transportation (3.8%), and electricity (3.5%). Some business owners did not know whether or not there were any obstacles to growing their businesses (5.3%) (Finmark Trust, 2010). The major problems faced by small businesses include capital shortages and inadequate demand. Inadequate demand could be due to a number of reasons including inadequate access to markets, disadvantages of scale, and poor marketing or lack of marketing skills. Luiz (2002) summarised the problem areas as follows: finance, labour (cost and skills availability), trade (restrictive regulations), tax (complexity), procurement (inaccessibility), infrastructure (especially in townships and rural areas), and demand. When South African small business owners were asked to identify the three most

serious constraints they encounter in running their business, the most prominent factors identified were the shortage of funds (38.4%), overtrading (i.e., too many competitors) (33.3%), crime/theft (31.4%), and non-payment of customer accounts (bad debts) (30.7%) (Ligthelm, 2002).

3 Methodology

We employed semi-structured interviews for data collection from participants drawn from small business support institutions and from formal and informal business owners. We employed purposive sampling in that participants were primarily selected because of our expectation that they were well informed regarding the subject under investigation. Altogether, eighteen participants from institutions involved in enterprise development (10 managers, 4 directors, 2 researchers, and 2 chambers of commerce representatives) and twenty-six participants from the small business sector were interviewed for this study. The sample of twenty-six small businesses was involved in the retail trade ranging from informal unregistered hawkers to registered grocery stores and township liquor traders. The sample sizes of twenty-six and eighteen participants for business owners and stakeholders are considered adequate for the purpose of this study for two reasons. Firstly, by the time the twenty-sixth and eighteenth interviews were conducted, data saturation was evident in that additional data did not generate new findings on the subject under investigation (Glaser and Strauss, 1967). Secondly, the sample sizes are above the minimum recommended by Bertaux (1981: 35) who suggests fifteen as the minimum sample size in all qualitative research and Mason (2010) who recommends sample sizes ranging from 10 to 40.

Though participants were encouraged to answer all the questions, they were informed, in line with the ethical clearance granted to the researchers, that if they did not want to answer any question they could do so and that they were at liberty to opt out of the interview at any point without consequences. The interviews typically lasted between 30 and 60 minutes. With the consent of the participants, all the interviews were voice recorded to allow for attentive and active listening by the researcher. Consistent with the objective of the study, (i.e., to identify the external and internal barriers to and enablers of the start-up, survival and growth of SMMEs), both samples of participants were asked to identify and discuss a) what they considered to be the most important internal and external barriers to the formation and growth of informal and SMME retailers and b) what they considered to be the most important internal and external enablers to the formation and growth of informal and SMME retailers.

We employed framework analysis in the data analysis (Richie and Spencer, 1994). This is a qualitative data analysis approach that is used mainly

in applied policy research. Though inductive in approach, framework analysis permits the inclusion of a priori concepts in addition to emergent concepts in the analysis. As we began data collection with specific issues to investigate, this approach was considered appropriate. We employed all five stages of framework analysis namely; familiarisation, developing a thematic framework, indexing (coding), charting, and mapping and interpretation. In the first stage, the data was transcribed to extract key messages and quotes. . The transcripts were read several times to ensure they were correct and that they became familiar. Secondly, based on a priori issues, we developed the initial thematic framework to use for coding. The main themes or categories we employed are internal barriers, external barriers, internal enablers, and external enablers. These themes are consistent with the Department for Business Innovation and Skills’ (2013) clusterisation of the key enablers of business success for SMMEs into internal

capacity and capability, the external environment, and the vision of the business owners. In the third stage, having developed the thematic framework to employ in coding, we started the process of indexing (coding). This stage involved identifying specific pieces of data (i.e., category dimensions) relating to each one of the themes in the framework. In the fourth stage, charting, we used the headings (i.e., a priori themes initially) from the thematic framework to create thematic charts in which we populated all the main pieces of data for each participant according to the themes in which they fell. Finally, the last stage, mapping and interpretation, involved the search for patterns, explanations, concepts, and associations in the data. Our focus was on identifying the different types of data falling within and outside the a priori themes. This process enabled us to determine the areas and extent of commonality within and between the two participant groups. The resulting themes and codes (category dimensions) are summarised in Table 2.

Table 2. Themes and codes (category dimensions)

Theme	Codes (category dimensions)	Stakeholders		Business owners	
		Count	%	Count	%
External barriers	Competition	5	42	9	35
	Lack of access to markets	5	42	0	0
	Labour laws (not conducive to business growth)	3	25	0	0
	Lack of entrepreneurial education	3	25	0	0
	Business registration process	4	33	0	0
	Reason for being in business (business not the first career choice)	4	33	0	0
	Ignorance about support services available	2	17	0	0
	Conflicting regulations (e.g., refugee rights to trade vs promotion of local businesses)	3	25	0	0
	Customer demands	0	0	11	42
	Shelter and facilities			8	31
Internal barriers	Lack of support for SMMEs (including funding)	5	42	10	38
	Other threats			11	42
	Poor internal controls (e.g., no separation between business and personal resources)	7	58	4	15
	Poor/insufficient market research	5	42	0	0
	Negative attitude to business and competition	2	14	0	0
	Skills shortage	8	67	8	31
	Lack of capital	0	0	11	42
	Lack of equipment	0	0	4	15
	Lack of shelter	0	0	6	23
	Lack of capacity to deliver orders	0	0	3	13
External enablers	Inability to order stock from right sources	0	0	2	8
	Others	0	0	4	15
	Training opportunities	2	17	0	0
	Access to funding (for good business ideas)	2	17	0	0
	Support programme (e.g., from SEDA)	3	25	0	0
	Generally conducive environment	5	42	0	0
	Shopping centres as business hubs	0	0	3	13
	Increasing demand	0	0	5	19
	Delivery of stock by some suppliers	0	0	1	4
	Internal enablers	Technical skills	1	8	0
Networking skills		1	8	0	0
Skilled owners		0	0	5	19

To enhance the validity and reliability of the study, and in light of the qualitative nature of the study, we employed trustworthiness as proposed by Guba and Lincoln (1994). We took into consideration the different types of criteria of trustworthiness namely credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity) (Bryman and Bell, 2007). Credibility addresses the congruency of the findings with reality. To establish credibility requires good practice in the conduct of research such as subjecting the findings to confirmation to ensure correct understanding (Bryman and Bell, 2007). In this study, we sought to realise credibility by the use of data triangulation involving two different types of data sources namely stakeholders from small business support institutions and small business owners. While acknowledging that it is difficult to replicate exact situations in investigations involving social interaction, we sought to mitigate this challenge and enhance transferability of findings by providing a clear description of the context and type of informants we interviewed. Further, we voice-recorded the interviews, and which, together with our description of

the context and findings, will enable readers to make judgments about the possible transferability of findings to other similar situations. To ensure dependability, researchers keep records of the research process (Bryman and Bell, 2007). In this case, we have ensured that the findings are auditable because, while providing anonymity by delinking statements from participants, the participants are still contactable to confirm their participation. Additionally, as argued by Guba and Lincoln (1994), demonstrating credibility as we have done above in part contributes to dependability. Finally, confirmability is concerned with objectivity and ensuring that the reported findings are those of the participants or informants rather than the researcher's. To minimize researcher bias, we employed triangulation of data sources.

4 Findings and discussion

The profile of the small and informal business owners interviewed is summarised in Table 3. Forty-two percent of the small business owners we interviewed have been operating for over ten years.

Table 3. Profile of the business owner participants

Characteristic	Category	Count	%
Business age	0-2	2	8
	2-5	4	15
	6-10	5	19
	11 and above	11	42
	Not known	4	15
Source of start-up capital	Own resources	23	88
	Family	3	13
	Informal loan	1	4
Self-reported growth trend	Growing	12	46
	Static	6	23
	Declining	6	23
	Not known	2	8
Registration status	Registered	5	19
	Not registered	18	69
	Not disclosed	3	13
Reasons for starting the business	Desire to be self-employed	2	8
	Unemployment	6	23
	Financial necessity	1	4
	Not disclosed	17	65

4.1 Business owner perceptions of external barriers and enablers

A number of external barriers were identified including competition ($n=9$), customer demands ($n=11$), lack of shelter and facilities ($n=8$), and lack of support for SMMEs ($n=10$). There was a view that customers are becoming more demanding with regard to prices and level of service they expect. Some business owners perceived these customer demands for quality and good services as a threat. The business

owners claimed that they "...cannot meet these price demands because prices at the suppliers are high" (Business owner 13). According to Business owner 5, "local customers are unwilling to pay reasonable prices, hence our dependence on tourists and customers from outside our township. We also take our furniture to flea markets whenever we can". The sources of competition identified are immigrant-owned shops and national shops operating from shopping malls. There was a perception, however, that "immigrant owned shops are more of a threat than

shopping malls because of their everyday low prices” (Business owner 10). On the other hand “shopping malls have specials every month” (Business owner 23). Other issues relating to customer demands include non-payment or late payment by credit customers and what was seen as unreasonable returns of non-perishable goods for refunds.

The inadequacy and absence of basic shelter and facilities was also identified as a major problem in the development of SMMEs. For example, because they operate in makeshift structures, some business owners are prone to suffering losses due to inclement weather. The absence of appropriate storage facilities means that business owners have to transport their goods and services to and from the place of operation every business day. The challenge of basic shelter and facilities is related to the perceived lack of support for SMMEs from the government; although Business owner 6 shared this perception, he was quick to admit “but I once attended a business management training program”. For some, lack of access to capital was a manifestation of this perceived lack of assistance. To illustrate, Business owner 21 stated “I can’t get access to capital because I cannot provide surety”. Business owner 23 claimed “...we don’t get (financial and training) support from our government. ...I have applied for funding but been unsuccessful; government must relax requirements for funding for small businesses”. Other threats identified include seasonality of some businesses, dependence on tourists, rising costs of inputs, minimum wage requirements, unreliability of short-term employees, unemployment, and security.

The external enablers or opportunities identified by the business owners include increasing demand ($n=5$), the advent of shopping malls ($n=3$), and the delivery of stock by suppliers to some of the small businesses ($n=1$). Though some of the participants reported that their businesses were not doing well in terms of sales ($n=6$), some were of the view that demand for their goods and services was growing ($n=12$). Similarly, though some business owners saw the advent of malls as a threat to their fledgling businesses, others saw this as an opportunity because malls act as business hubs and therefore attract customers, some of whom patronise small businesses ($n=3$). According to Business owner 8, big retailers and malls “are not the main challenge but an opportunity as I see people leaving the shopping centre and coming here to buy”.

4.2 Stakeholder perceptions of external barriers and enablers

Forty-two percent of the participants ($n=5$) from small business support institutions identified increasing competition in the small business sector as a major problem, particularly in the retail sector in townships and small towns. The main sources of competition identified were immigrant-owned shops and national

stores located mainly in malls. The participants suggested that many local stores owned by citizens were not able to compete favourably due to inappropriate business skills in areas such as procurement ($n=8$) and failure to collaborate and cooperate with other businesses ($n=1$).

Some aspects of the policy and regulatory environment were highlighted as barriers to SMME development. In particular, the centralised business registration process was found to be an onerous and discouraging factor ($n=4$). Labour laws relating to conditions of employment and the minimum wage were identified as stumbling blocks in small businesses offering formal employment ($n=3$). Some participants pointed out that better coordination between government departments dealing with small business enterprises would contribute to improving the policy and regulatory environment ($n=3$). Finally, the lack access to markets, including local procurement policies at the local government level, was also seen as a hindrance to small business development ($n=5$).

The stakeholders acknowledged that a number of factors operated as enablers to SMME development and affirmed that the business environment in South Africa is generally conducive for SMMEs ($n=5$). For example, there were a number of business support services in place such as training, mentorship programs, and other business development services provided by both public and private sector institutions.

4.3 Business owner perceptions of internal barriers and enablers

The lack of capital was the major internal impediment identified by the business owners ($n=11$). The other internal barriers were lack of or inadequate equipment ($n=4$), lack of appropriate shelter ($n=6$), lack of capacity to deliver orders ($n=3$), inability to order stock from right sources ($n=2$), skills shortages ($n=8$), and failure to separate the business from owners ($n=4$). Others include production capacity constraints, and uncompetitive pricing ($n=4$). The lack of capital was manifested in various areas including the inability to order stock in the right quantities and from the right sources, failure to build or expand shelter, and the lack of equipment. In the words of Business owner 1: “Government must help us with money. We have tried the banks to raise capital...” but “The banks ask you how much you have before they can help you” (Business owner 6). To emphasise that it is not hand-outs from government that they need Business owner 18 added “Help from government is does not have to be hand-outs. Loans on good terms would help”.

Some business owners acknowledged that lack of skills is a major impediment in their businesses ($n=8$); the main area being a lack of general business management skills. For example, business owners, such as Business owner 1, understand the need to address his lack of marketing skills: “I don’t know how I can keep people or customers from going to the

national stores but come to us (i.e., small business retailers)”. Most business owners did not identify any internal enablers save for their skills as business owners (n=5). These included businesses owners who relied on their skills as carpenters and tailors, for example.

4.4 Stakeholder perceptions of internal barriers and enablers

Major internal barriers identified by stakeholders were inappropriate or poor skills (n=8). These were evident in areas such as entrepreneurship, finance, business management, business development, networking skills, productivity, planning, marketing, and leadership. Other barriers include poor internal controls (e.g., no separation between business and personal resources) (n=7), insufficient market research (n=5), and negative attitudes to business and competition (n=2). Within the business enterprises, success was more likely if the business owner had appropriate business management skills, an entrepreneurial work ethic, access to finance, and the appropriate technical skills. Stakeholder 6 emphasised: *“The absence of skills is a major issue, but it is compounded by a failure to provide services for which there is a need in the community. The business owners do not go out of their way to differentiate their businesses from competitors. Immigrant business owners relate to customers very well, hence the moniker ‘my friend shops’. To emphasise, the importance of collaboration, the benefits of networking and belonging to appropriate business associations, were also identified as important business enablers for SMMEs (n=1). According to Stakeholder 8 “the business owners do not have a formal or informal structure to operate in...it is each on his or her own...hence they have no buying or bargaining power”.*

To sum up, a comparison of the two groups of participants shows that both groups were in agreement about the lack of support (including funding) and competition being amongst the major external barriers to the growth of small businesses. However, while the business owners viewed customer demands and lack of shelter and facilities as part of the top three external barriers, the stakeholders included lack of access to markets and the onerous business registration process. The groups did not share the same view on internal barriers, except for poor internal controls (i.e., lack of separation between business and personal resources). For the business owners, the main internal barriers were a lack of funds shelter, facilities, and equipment. In contrast, the stakeholders saw the main internal barriers as lack of skills, failure to separate personal from business resources, and insufficient market research. There was no commonality regarding the top external enablers between the two groups. While some business owners saw increasing demand and the advent of shopping malls as enablers of small business

development; stakeholders pointed to what they said was a generally conducive business environment, the availability of business support programs, and funding for good business ideas as the main external enablers; all part of the external environment according to the Department for Business Innovation and Skills’ (2013) clusterisation of the key enablers of businesses success. Both groups only identified the business owners’ skills as the main internal enabler because it is evidence of the internal capacity and capability of an SMME.

5 Conclusion and recommendations

This study sought to identify the major external and internal barriers and enablers to the start-up, survival and growth of small and informal businesses involved in retail. The main barriers were identified as increasing competition, inappropriate and poor business skills, lack of collaboration, and aspects of the policy and regulatory environment. Other barriers include the lack of funding, poor positioning, poor internal controls (including failure to separate personal and business affairs), reasons for going into business, lack of access to markets, insufficient market research, failure or unwillingness to take up business development assistance, and inadequate or inappropriate use of technology. A number of enabling factors were also identified including the generally conducive business environment, access to finance for good business ideas, and availability of business support services.

The findings relating to the barriers and enablers in this paper are consistent with the conceptual foundations as outlined in the literature review. For example, the findings relating to the barriers of competition, customer demands, and lack of shelter and facilities can be explained by the retail levers of success including store factors, service factors, price factors, and supply chain factors (Grewal et al., 2010). They are also consistent with previous research on the barriers encountered by SMMEs (e.g. Coad and Tamvada, 2012; Finmark Trust, 2010; Okpara and Kabongo, 2009; Okpara and Wynn, 2007; Fielden, Davidson and Makin, 2000). Similarly, the findings relating to the enablers of success identified in this study are congruent with one of the three clusters of enablers identified by the Department for Business Innovation and Skills (2013), namely the external environment and the market; under which increasing demand, market dynamics, the business environment, and business support programs fall. However, the juxtaposition of business owner perceptions with those of stakeholder perceptions reveals that although there is agreement on what the barriers and enabling factors are, there are some differences regarding the importance attached to these factors by the two groups. In order to determine whether these differences are generalisable or not, a larger study

would be required. This is an area of enquiry further research on this topic could pursue.

Based on the findings, the following recommendations are made. The lack of business management skills emerged as a major problem. The first recommendation is, therefore, that resources be devoted to undertaking comprehensive training needs analyses to facilitate the design of appropriate skills development interventions. Addressing the skills gaps could help overcome many other barriers such as poor positioning, poor internal controls, and poor market research. In order to encourage more business owners to participate in these programs, the focus must not only be on creating awareness of these programmes but also on incentivising attendance. For one-person businesses, attending a training programme has the opportunity cost of lost income as the business has to close while the owner attends the training programme. As most of the informal business owners are forced into business by necessity, it is very unlikely that they will go into business having had some business management experience. This means that as far as business management experience is concerned, they start their businesses from a point of weakness. In addition to training, the use of mentors should be considered to help these businesses.

We found that 88% of the traders used their own private resources for start-up capital in their businesses. Business owners who manifest entrepreneurial flair and the desire to grow should be funded and offered business management training as a condition for funding. Shelter and services were in some cases non-existent or not up to standard. One key lever of retail success relates to store factors. Assistance is therefore required to help emergent retailers upgrade their shelters and accompanying services. A failure or unwillingness to take up available business development resources was also a problem. It is recommended that appropriate measures for creating awareness be implemented. Such measures could include business fairs in the communities and working with community-based business associations and local development associations.

We found that owner and stakeholder perceptions of what the key barriers and enablers are did not coincide in some cases. This suggests that it is important for SMME development institutions to involve business owners in the design of interventions to improve the performance of SMMEs. However, both the business owners and the stakeholders were in agreement about the key external barriers being lack of support (including funding) and competition, and the key internal barriers being skills shortages and lack of internal controls. Therefore, intervention strategies to improve the performance of SMMEs should start internally with skills development and strengthening internal controls before attending to funding issues. Without improving the business

owners' relevant skills, all attempts to improve the performance of SMMEs will likely not be effective.

References

1. Baker, J., Parasuraman, A., Grewal, D. and Voss, G. (2002), The influence of multiple environment cues on perceived merchandise value and patronage intentions, *Journal of Marketing*, Vol. 66, pp.120-141.
2. Bennison, D. and Hines, T. (2003), Guest editorial: Retailing for communities: issues of inclusion and exclusion. *International Journal of Retailing and Distribution Management*, Vol. 31, No. 8, pp. 385-388.
3. Berner, E., Gomez, G. and Knorringa, P. (2012), 'Helping a large number of people become a little less poor': The logic of survival entrepreneurs, *European Journal of Development Research*, Vol. 24, No. 3, pp. 382-396.
4. Bertaux, D. (1981), "From the life-history approach to the transformation of sociological practice", in Bertaux, D. (Ed.), *Biography and society: The life-history approach in the social sciences*, Sage, London, pp.29-45.
5. Bryman, A. and Bell, E. (2007), *Business Research Methods*, Oxford University Press, New York.
6. Cant, M. C. and Ligthelm, A. A. (2002), *Small business problems in the South African context: A proactive entrepreneurial approach*, 7th Asia-Pacific Decision Sciences Institute Conference, Bangkok, July 2002.
7. Coad, A. and Tamvada, J. P. (2012). Firm growth and barriers to growth among small firms in India. *Small Business Economics*, Vol. 29. Pp. 383-400.
8. Coca-Stefaniak, J.A., Parker, C. and Rees, P. (2010), Localisation as a marketing strategy for small retailers, *International Journal of Retail and Distribution Management*, Vol. 38, No. 9, pp. 677-697.
9. D'Andrea, G., Ring, L., Lopez-Aleman, B. and Stengel, A. (2006), Breaking the myths on emerging consumers, *International Journal of Retail and Distribution Management*, Vol. 34, No.9, pp. 661-673.
10. Dawson, J. (2000), Retailing at century end: Some challenges for management and research, *The International Review of Retail, Distribution and Consumer Research*, Vol. 10, No. 2, pp. 119-148.
11. Department for Business Innovation and Skills. (2013), SMEs: The key enablers of business success and the economic rationale for government intervention". Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/266304/bis-13-1320-smes-key-enablers-of-business-success.pdf (accessed 10 March 2015).
12. Dockel, J. A. and Ligthelm, A. A. (2002), Factors that contribute to small business survival, *Southern African Business Review*, Vol. 6 No.2, pp. 1-7.
13. Fielden, S. L., Davidson, M. J. and Makin, P. J. (2000), Barriers encountered during micro and small business start-up in North-West England, *Journal of Small Business and Enterprise Development*, Vol. 17, No. 4, pp. 295-304.
14. Finmark Trust. (2010), *FinScope South Africa Small Business Survey 2010*.
15. Glaser, B. and Strauss, A. (2008), *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Aldine Publishing Company, New York.

16. Greeff, H. P. and Mfuni, K. (2010), Strategic drivers for retail in SA-considerations in the controllable and uncontrollable landscape of the future, *International Retail and Marketing Review*, Vol. 6, No. 1, pp. 82-84.
17. Grewal, D., Krishnan, R., Levy, M. and Munger, J. (2010), Retail success and key drivers, in Krafft, M. and Mantrala, M. K. (Eds.), *Retailing in the 21st Century: Current and Future Trends*, Springer Berlin Heidelberg, New York, pp. 15-30.
18. Guba, E. G. and Lincoln, Y. S. (1994), Competing Paradigms in Qualitative Research, in Denzin, N. K. and Lincoln, Y. S. (Eds.), *The Handbook of Qualitative Research*, Sage, Thousand Oaks, CA, pp. 105-117.
19. Herrington, M., Kew, J. and Kew, P. (2010), GEM: Global entrepreneurship monitor. Report, University of Cape Town, Cape Town.
20. Khavul, S., Bruton, G.D. and Wood, E. (2009), Informal family business in Africa, *Entrepreneurship Theory and Practice*, November, pp. 219-238.
21. Lee, S., Johnson, K. P. and Gahring, A. S. (2008), Small-town consumers' disconfirmation of expectations and satisfaction with local independent retailers, *International Journal of Retail Management and Distribution*, Vol. 36, No. 2, pp. 143-157.
22. Ligthelm, A. A. (2004), Profile of informal microenterprises in the retail sector of South Africa, *Southern African Business Review*, Vol. 8, No.1, pp.39-52.
23. Ligthelm, A. A. (2013), Confusion about entrepreneurship? Formal versus informal businesses, *Southern African Business Review*, Vol. 17, No. 3, pp. 57-75.
24. Luiz, J. (2002), Small business development, entrepreneurship and expanding the business sector in a developing economy: The case of South Africa, *The Journal of Applied Business Research*, Vol. 18, No. 2, pp.53-68.
25. Mason, M. (2010), Sample size and saturation in PhD studies using qualitative interviews. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, Vol. 11, No. 3, Art. 8, <http://nbn-resolving.de/urn:nbn:de:0114-fqs100387>.
26. Morris, M. H., Pitt, L. F. and Berthon, P. (1996), Entrepreneurial activity in the Third World informal sector: The view from Khayelitsha, *International Journal of Entrepreneurial Behaviour and Research*, Vol. 2, No.1, pp. 59-76.
27. Nobel, C. (2011), Why companies fail – and how their founders can bounce back, *Harvard Business School Working Knowledge*, March 7, pp. 1-2.
28. Okpara, J. O. and Wynn, P. (2007), Determinants of small business growth constraints in a sub-Saharan African economy, *SAM Advanced Management Journal*, Vol. 72, No. 2, pp. 24-35.
29. Okpara, J. O. and Kabongo, J. D. (2009), An empirical evaluation of barriers hindering the growth of small and medium sized enterprises (SMEs) in a developing economy, *African Journal of Business and Economic Research*, Vol. 4, No. 1, pp. 7-21.
30. Palakurthi, P. and Maddocks, W. O. (2006), Micro-enterprise development in emerging markets, *International Journal of Emerging Markets*, Vol. 1, No. 4, <http://dx.doi.org/10.1108/ijjem.2006.30101daa.002>.
31. Parker, C. and Byrom, J. (2000), *Towards a Healthy High Street-Training the Independent Retailer*, Report, The Manchester Metropolitan University, Manchester.
32. Portes, A. and Haller, W. (2005), The informal economy, in Smelser, N. J. and Swedberg, R. (Eds.), *Handbook of Economic Sociology*, Russell Sage Foundation, New York, pp. 403-427.
33. Pretes, M. (2002), Microequity and microfinance, *World Development*, Vol. 30, No. 8, pp. 1342-1353.
34. Richie, J. and Spencer, L. (1994), Qualitative data analysis for applied research, in Bryman, A. and Burgess, R. (Eds.), *Analysing Qualitative Data*, Routledge, London, pp. 173-194.
35. Rogerson, C. M. (2013), Improving market access opportunities for urban small, medium, and microenterprises in South Africa, *Urbani izziv*, Vol. 24, No. 2, pp. 133-143.
36. Rolfe, R., Woodward, D., Ligthelm, A. and Guimaraes, P. (2010), The viability of informal and micro enterprises in South Africa, Available at: <https://whitman.syr.edu/programs-and-academics/centers-and-institutes/abp/conference/papers/The%20Viability%20of%20Informal%20Micro-Enterprise%20in%20South%20Africa.pdf> (accessed 12 August 2014).
37. Schmidt, R., Bennison, D., Bainbridge, S. and Hallsworth, A. (2007), Legislation and SME retailers - Compliance costs and consequences, *International Journal of Retail and Distribution Management*, Vol. 35No. 4, pp. 256-270.
38. Schneider, F. (2005), Shadow economies around the world: What do we really know?, *European Journal of Political Economy*, Vol. 21, pp. 598-642
39. Smith, A. and Sparks, L. (2000), The role and function of the independent small shop: The situation in Scotland, *International Review of Retail, Distribution and Consumer Research*, vol. 10, No. 2, pp. 205-226.
40. Storey, D. J. (1994), *Understanding the Small Business Sector*, Thomson, London.
41. Willemse, L. (2011), Opportunities and constraints facing informal street traders: Evidence from four South African cities, *SSB/TRP/MDM* 59: pp. 7-15.
42. Yu, D. (2012), Defining and measuring informal employment in South Africa. *Development Southern Africa*, Vol. 28, No. 1, pp. 157-175.

THE IMPACT OF MATERIALISM ON THE ENTREPRENEURIAL INTENTION OF UNIVERSITY STUDENTS IN SOUTH AFRICA

*Olawale Fatoki**

Abstract

The study investigated the relationship between materialism and the entrepreneurial intention of students at a South African university. In addition, the study examined if there is a significant gender difference in the materialistic values of university students. The quantitative research technique was adopted for the study. The survey method and the self-administered approach were used for data collection. The research participants comprised of 169 conveniently sampled business students. The Cronbach's alpha was used to ensure reliability. Data was analysed using descriptive statistics, confirmatory factor analysis, T-test, Pearson correlation and regression. The results indicated that there is a positive but insignificant relationship between materialism and the entrepreneurial intention of university students. There is no significant gender difference in the materialistic values of university students. Recommendations were suggested in order to manage the materialistic values of university students.

Keywords: Materialism, Entrepreneurial Intention, Gender, University Students, South Africa

**Department of Business Management, University of Limpopo, Private Bag X1106 Sovenga 0727, Limpopo Province, South Africa
Tel: 015 268 3897*

1 Introduction

South Africa suffers from a high rate of unemployment. The country's unemployment rate is currently 25% (Statistics South Africa 2015). The International Labour Organisation (2015) estimates that South Africa will have the eighth-highest unemployment rate in the world before the end of 2015. Youth unemployment is estimated to be 60% (Herrington, Kew & Kew 2015). Graduate unemployment is currently low and was estimated to be a little under 5% in 2011 (The Centre for Development & Enterprise 2013). However, graduate unemployment is gradually increasing in line with the general unemployment rate (Oluwajodu, Blaauw, Greyling & Kleynhans 2015). High level of unemployment wastes scarce human capital and leads to social exclusion, crime and social instability (de Witte, Rothmann & Jackson 2012). Entrepreneurship is one of the ways through which university graduates could become employed and also create jobs for other people (Luiz & Mariotti 2011). Entrepreneurship will not only create employment but can help to improve the low economic growth rate of South Africa (Peters & Naicker 2013).

Herrington et al. (2015) in the Global Entrepreneurship Report remark that entrepreneurship as measured by the Total Early-stage Entrepreneurial Activity (TEA) is very low in South Africa. The

authors found that South Africa has an alarmingly low level of entrepreneurship despite a high level of unemployment. For a developing country, South Africa's level of entrepreneurial activity is only a quarter of other Sub-Saharan Africa countries. Entrepreneurial activity as measured by the TEA dropped by a shocking 34% from 10.6% to 7% in 2014. This implies that only 7% of the adult population in South Africa are engaged in entrepreneurial activities while only 2.7% own established businesses. Herrington et al. (2015) further stated that entrepreneurial intention (the intention of an individual to start a business) dropped in South Africa by 23% from 15.4% in 2013 to 11.8% in 2014. South Africa's entrepreneurial intention is significant lower than other Sub-Saharan African countries. Entrepreneurial intention in South Africa is only 20% of the regional average. The entrepreneurial intention in efficiency-driven economies where South Africa is classified by the Global Entrepreneurship Monitor is on the average 22.8%. This is almost double that of South Africa (Herrington et al. 2015).

There is a strong positive association between intention and actual behaviour as pointed out by the theory of planned behaviour (Ajzen 1991). An increase in entrepreneurial intention is one of the ways to improve the weak level of entrepreneurship in South Africa (Herrington et al. 2015). To improve entrepreneurial intention, it is important to understand

its drivers (Beeka & Rimmington 2011). According to Ashley-Cotleur, King and Solomon (2009), there are some individual variables that can influence entrepreneurial intention. These can largely be classified as (1) demographic and (2) attitudes, values or psychological. Demographic variables include family/parental background, age and gender (Fatoki 2014). Attitudes toward autonomy, risk, achievement can help to explain entrepreneurial intention (Farouk, Ikram & Sami 2014). The attitude or importance attached to the accumulation of wealth can also influence intention (van Gelderen, Brand, van Praag, Bodewes, Poutsma & van Gils 2008). The meaning attributed by individuals to money and possessions directly affects their behaviour (Burns & Gupta 2014).

Materialism can be regarded as a personal value that is associated with the beliefs of individuals about the importance that wealth and possessions play in their lives (Richins 2011; Bevan-Dye & Surujlal 2011). Materialism is a contentious issue and has its advantages and disadvantages (Duh 2015). On the negative side, materialism is associated with such characteristics as consumer bankruptcy, unhappiness and life dissatisfaction. This can be termed as detrimental materialism (Sidhu & Foo 2015). On the positive side, materialism can support motives such as the need to achieve and succeed (Duh 2015). Materialism can motivate people to work harder in order to improve their purchasing and living standards. This is termed instrumental materialism (Karabati & Cemalcilar 2010; Sidhu & Foo 2015). This suggests that materialism can positively affect entrepreneurial intention.

Materialism has stimulated some studies in South Africa (Jacob & Smit 2010; Bevan-Dye & Surujlal 2011; Duh 2015). In addition, factors influencing the entrepreneurial intention of students have been the focus of many empirical studies in South Africa (Fatoki 2014; Malebana & Swanepoel 2015; Tshikovhi & Shambare 2015). However, no study in South Africa has empirically investigated the impact of materialism on entrepreneurial intention. In addition, the literature is inconclusive about the effect of gender on materialism (Karabati & Cemalcilar 2010). The findings of this study will help to deepen the understanding of the factors that influence the entrepreneurial intention and materialism of university students. The study focuses on a sample of business students. First, it is easy to control for the effect of entrepreneurship education because all the students have done entrepreneurship. Business students are a very important clientele for entrepreneurship education institutions. It is of significance to understand the factors that influence their career choices and intentions (van Gelderen et al. 2008). The study was guided by the following research questions: What is the relationship between materialism and the entrepreneurial intention of university students? Is there a significant gender difference in the materialistic values of university students?

2 Theoretical framework of entrepreneurial intention

Entrepreneurial intention can be described as the intention of an individual to start a business or a new value driver inside an existing organisation (Nguni, Gakure, Waithaka & Kiwara, 2012.) Intention is the state of mind or attitude which influences entrepreneurial behaviour (van Gelderen et al. 2008). Intention is the first step in understanding and implementing the process of entrepreneurship (Shafique, Tanveer, Akbar & Rizvi 2013). Theoretical explanations of entrepreneurial intention include the theory of entrepreneurial event (Shapero & Sokol, 1982) and the theory of planned behaviour (TPB) (Ajzen, 1991). The theory of entrepreneurial events by Shapero and Sokol (1982) posit that business start-up is a function of desirability (the attractiveness of starting a business), feasibility (this relates to the degree to which an individual feels capable of starting a business and propensity to act (this relates to the personal disposition of an individual to act on his/her decisions). The TPB by Ajzen (1991) argues that intention is a predictor of actual behaviour. The intention to perform various kinds of behaviour can be predicted from attitudes toward the behaviour, subjective norms and perceived behavioural control. This study is anchored on the TPB. Norris, Kruger and Carsrud (2010) concur that the TPB is a well-grounded theory that strongly predicts both conceptually and empirically a wide variety of planned behaviours. Kautonen, Van Gelderen and Erno (2013) empirically tested the TPB in the prediction of venture start-up intentions and subsequent behaviour. Econometric results by the authors indicate that intention is a significant predictor of subsequent behaviour. The TPB suggests that behaviour of university students later in life can be predicted by their current intention and attitude.

3 Materialism

Burns and Gupta (2014) submit that the importance an individual attach to possession can be explained by examining the materialistic values of such individual. Belk (1984:291) defines materialism as “the importance a consumer attaches to worldly possessions. At the highest levels of materialism, such possessions assume a central place in a person’s life and are believed to provide the greatest source of satisfaction and dissatisfaction”. Materialism consists of four personality traits. These are envy, non-generosity, and possessiveness and preservation (Belk 1985; Ger & Belk 1996). Materialism can be viewed as a personal value that is reflected by people’s beliefs about the importance that possessions and wealth accumulation play in their lives (Richins 2011; Hudders & Pandelaere 2012).

Materialism has negative and positive consequences (Duh 2015). The negatives costs of

materialism include depleted savings, rising consumer debt, consumer bankruptcy, unhappiness, depression and life dissatisfaction (Chaplin & John 2010; Duh 2015). This is termed detrimental terminal materialism (Sidhu & Foo 2015). Many religions look at materialism and the obsession that it creates as incompatible with religious commitments (Roberts & Clements, 2006). Materialism is a contentious issue although it is usually associated with a negative connotation (Bevan-Dye, Garnett & de Klerk 2012). Materialism can also foster positive motives such as the need to achieve self-sufficiency or the need to succeed ((Kamineni 2005) Materialism can motivate people to work harder in order to increase their purchasing power and living standards. This can enhance firm profitability and national economic growth (Sirgy, Grel-Atay, Webb, Cicic, Husic, Herrmann, Hegazy, Lee & Johar 2011). Materialism can be a satisfier of the need for distinctiveness (Duh 2015). This is a positive societal outcome of materialism (Britton 2010). Positive instrumental materialism occurs when possessions and money make life safer and more enjoyable (Sidhu & Foo 2015).

4 Materialism and entrepreneurial intention

The literature has examined many drivers of entrepreneurial intention. Van Gelderen et al. (2008) point out that the drivers of entrepreneurial intention include (1) Perceived behavioural control (creativity, entrepreneurial alertness, perseverance and entrepreneurial self-efficacy) (2) Subjective norms (the influence of parents and friends) and (3) Attitudinal variables (autonomy, challenge and lack of financial security). Another attitudinal variable that can affect entrepreneurial intention is the importance attached to the accumulation of income and wealth (Pruett, Shinnar, Toney, Llopis & Fox 2009).). When an individual works for an organisation, the amount of wealth that can be accumulated is relatively fixed. In self-employment, the prospects of accumulating wealth are theoretically infinite (van Gelderen et al. 2008). Materialistic values can have a positive association with intention. Jaronnwanit, Supasarn and Deeboonmee (2015) find that an individual's materialistic values have a positive impact on the intention to buy property. Materialism is one of the factors that impact on consumers buying intention (Hidayat & Diwasari 2013; Teik, Kamaruddin, Bulathsinalage & Seneviratne 2013). Materialism can support positive motives and the need to achieve and succeed. Materialism can motivate people to work harder in order to improve their purchasing and living standards (Bevan-Dye et al. 2011; Sidhu & Foo 2015). This suggests that materialism can positively influence entrepreneurial intention. Consequently, it is hypothesised that there is a significant positively

relationship between materialism and the entrepreneurial intention of university students.

5 Gender and materialism

Karabati and Cemalcilar (2010) remark that the literature has identified some antecedents of materialism. One regularly studied demographic factor is gender. The role that gender plays as an antecedent of materialism is unclear and the literature is inconclusive (Karabati & Cemalcilar 2010; Brouskeli & Loumakou 2014). Flouri (2004) finds that girls scored lower in materialism compared to boys. Felix, Ahmed and Hinck (2013) and Segal and Podoshen (2013) find that males have a significantly higher level of materialism compared to their female counterparts. A study by Handa and Khare (2013) revealed that gender has a moderating influence on the relationship between materialism and engrossment with fashion clothing. The study suggests a high level of materialism by women. Workman and Lee (2011) find that females scored higher on materialism than males. This can be attributed to the higher scores on the centrality subscale by females. Sidhu and Foo (2015) find no significant difference in the level of materialism of male and female undergraduate students in Singapore. Watchravesringkan (2012) argues that males have masculine characters such as competitiveness, material success and a strong feeling of independence. Women, in general have feminine traits such as being more sensitive to emotions and less competitive. Males have consistently proved their masculinity in all areas including material pursuits. This suggests that male students will have a higher level of materialism than female students. Consistent with the above literature, this study hypothesised that male students will have a significantly higher level of materialism compared to female students.

6 Research methodology

The study adopted the quantitative research approach with a descriptive and causal design. The study focused on the final year students (undergraduate level) in the Department of Business Management at a selected University located in the Limpopo Province of South Africa. These are students whose curriculum includes entrepreneurship and small business management in their first and second years in the university. The population was 182 students. This study employed the convenience sampling technique while data was collected using a self-administered questionnaire in a survey. The questionnaires were administered to the respondents during lecture period with the assistance of the lecturer. The completion of the questionnaire was voluntary and anonymity maintained. The questionnaire was divided into three sections as follows: (1) Biographical (the gender of the respondent) (2) materialism and (3) entrepreneurial orientation.

Operationalising materialism: Materialism was measured using the Material Value Scale (MVS) developed by Richins and Dawson (1992) and Richins (2004). The scale comprised eighteen items and has a high level of internal consistency and constructs validity. The MVS contains three dimensions. These are success, centrality and happiness. Five point Likert scale ranging from “1 strongly disagree to 5 strongly agree” was used to score the MVS items. Items in each dimension were averaged to form the mean score for each dimension. The mean scores of the three dimensions were summed to obtain the overall MVS score. The MVS has been widely used by authors who conducted empirical studies on materialism (Sidhu & Foo 2015; Jaroenwanit et al. 2015). Operationalising entrepreneurial intention: Seven questions developed from the literature by the researcher following the empirical studies of Zampetakis and Moustakis (2006) and Wu (2009) were used to measure entrepreneurial intention. Five point Likert scale ranging from “1 strongly disagree to 5 strongly agree” was used to score the entrepreneurial intention items. The seven measures were averaged to obtain the entrepreneurial intention score for each respondent. The Cronbach’s alpha was used as a measure of internal consistency. Data analysis included descriptive statistics,

confirmatory factor analysis, T-test, Pearson correlation and regression.

7 Results and discussions

169 questionnaires were distributed and 146 questionnaires were returned. The response rate was 86.4% comprising of 65 males and 81 females.

8 Confirmatory factor analysis for materialism

Confirmatory factor analysis (CFA) was performed on the responses to the eighteen item MVS scales. To ensure the use of factor analysis, the Barlett Test of Sphericity (BTS) and Kaiser-Meyer-Olkin (KMO) test of appropriateness were carried out accordingly. The results of the BTS 492.04, sig. 0.001 and KMO 0.778 indicated that the data were appropriate for the purpose of factor analysis. Table 1 depicts the results of the CFA. Only items with factor loading greater than 0.300 were retained. In addition only factors with Eigen value of not less than one were retained. Three factors were identified. These were labelled happiness, success and centrality. The Cronbach’s alpha for each of the three factors was greater than 0.700. Nunnally (1978) recommends reliabilities of not less than 0.70.

Table 1. Confirmatory factor analysis for materialism values

Items	Factor 1 Happiness	Factor 2 Success	Factor 3 Centrality
I’d happier if I could afford to buy more things	.792		
My life would be better if I owned certain things I don’t have.	.748		
I’d be happier if I could afford to buy more things.	.705		
Buying things give me a lot of pleasure	.671		
It sometimes bothers me quite a bit that I can’t afford to buy all the things I’d like.	.618		
I admire people who own expensive homes, cars, and clothes.		.775	
Some of the most important achievements in life include acquiring material possessions		.729	
The things I own say a lot about how well I’m doing in life.		.651	
I like to own things that impress people		.602	
I don’t pay much attention to the material objects other people own		.557	
I like a lot of luxury in my life			.608
I put less emphasis on material things than most people I know			.547
I try to keep my life simple, as far as possessions are concerned			.492
I usually buy only the things I need			.445
Eigenvalue	5.808	2.629	1.121
Variance %	41.006	17.274	8.125
Cronbach’s alpha	0.71	0.77	0.71

9 The dimensions of materialism

Table 2 illustrates the dimensions of materialism. Happiness has the highest mean at 3.92, followed by success and centrality respectively. The scale mean for materialism is 3.51. The results indicate that university students in the sample are materialistic. As pointed out by empirical studies such as Duh (2015) and Sidhu and Foo (2015), materialism is a contentious issue and has its advantages and disadvantages. The undesirable aspects of materialism include consumer bankruptcy, unhappiness and life dissatisfaction. The high level of materialism found by this study could lead to these adverse consequences in the lives of university students. However, materialism can also support positive effects such as the need to achieve and succeed. Materialism can motivate people to work harder in order to improve their purchasing and living standards. This is termed instrumental materialism. The high level of materialism by university students can also support these desirable consequences. The results are consistent with the findings of Kwan (2013) and Likitapiwat et al. (2015) that university students tend to be materialistic.

Table 2. Dimensions of materialism

Materialism factors	Mean	Standard deviation
Happiness	3.92	.92
Success	3.46	.98
Centrality	3.14	1.02
Materialism overall	3.51	.98

10 Entrepreneurial intention

Table 2 shows the results of entrepreneurial intention of business students. The scale mean for the entrepreneurial intention of business students is 3.959. This indicates a high level of entrepreneurial intention for business students. The general level of entrepreneurial intention is low in South Africa as indicated by the Global Entrepreneurship Monitor South African Report (Herrington et al. 2015). However, the entrepreneurial intention of business students seems to be much higher. According to Gerba (2012), university students whose major discipline is business management possess a more favourable view of careers in small business. Entrepreneurial education programs are a source of entrepreneurial attitude and overall intentions to become future entrepreneur. Business graduates are more likely to launch businesses and have a higher level of intention and a more developed perception of self-efficacy (Ediagbonya 2013; Fatoki 2014).

Table 3. Entrepreneurial intention

Statement	Mean	Standard deviation
1. I will start my business in the near future	4.124	1.021
2. It has been my intent to start my own business	4.102	1.076
3. Starting my own business is an attractive idea to me	3.995	1.107
4. I am enthusiastic about starting my own business.	3.992	1.001
5. It is desirable for me to start my own business.	3.998	1.005
6. I spent a lot of time thinking about owning my own business.	3.504	1.110
7. Owning my own business is the best alternative for me	4.001	1.009
Scale mean	3.959	1.016
Cronbach's alpha	0.73	

11 The effect of materialism on entrepreneurial intention

The Pearson correlation was used to test for the direction and strength of relationship between materialism and entrepreneurial intention. The results ($r=.452$ $p\text{-value}=.011$) indicate that there is a moderately positive but insignificant relationship between materialism and entrepreneurial intention. The regression results do not show a significant relationship ($p=.014$) between materialism and entrepreneurial intention.

Table 4. Correlation result for the relationship between materialistic value and entrepreneurial intention

	Entrepreneurial intention	
	R	P value
Materialism	.452	.011

Sig. at 0.05 level

Table 5. Regression result for the relationship between materialistic value and entrepreneurial intention

	Coef	SE Coef	T	P value
Constant	6.772	.715	6.650	.000
Materialism	5.214	.711	5.382	.014

Sig. at 0.05 level, $R=.398$, $R^2=.359$, Adjusted $R^2=.447$

12 The effect of gender on materialism

The results as shown by the descriptive statistics show that male students have higher scores than female students for two dimension of materialism. These are happiness and success. Female students have a higher score in centrality. For the overall measure of materialism, the results indicate that male students are more materialistic than female students. The results are consistent with the findings of studies such as

Karabati and Cemalcilar (2010) and Sidhu and Foo (2015). The T-test was used to determine if there is a significant gender difference in the materialism values. The results of the T-test (T=.824, sig. 0.56) for happiness, (T=0.895, sig 0.64) for success, (T=1.001, sig. 0.32) for centrality and (T= .994, sig. 0.29) for overall materialism do not show any significant gender difference for the dimensions and overall measure of materialism.

Table 6. The effect of gender on materialism

Gender	Happiness		Success		Centrality		Overall	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Male	3.99	0.96	3.59	0.89	3.08	0.96	3.55	1.01
Female	3.83	0.91	3.24	0.92	3.20	0.99	3.42	0.98

13 Conclusions

Materialism is a contentious issue and has its advantages and disadvantages. On the negative side, materialism is associated with such characteristics as envy and rising and unmanageable. This is detrimental materialism. On the positive side, materialism can support positive motives and the need to achieve and succeed. Materialism can motivate people to work harder in order to improve their purchasing and living standards. This is termed instrumental materialism. Entrepreneurial intention in South Africa is relatively low compared to other African countries and other efficiency-driven economies. The low level of entrepreneurial intention is one of the causes of the alarmingly weak level of entrepreneurship in South Africa. To improve entrepreneurial intention, it is important to understand the drivers. The study investigated the relationship between materialism and the entrepreneurial intention of university students in South Africa. In addition, the study examined if there is a significant gender difference in the materialistic values of university students. The results indicate a positive but insignificant relationship between materialism and the entrepreneurial intention of students. There is no significant gender difference in the materialistic values of university students.

14 Recommendations

The study recommends that materialism should be managed. Whilst it is good for students to appreciate wealth and thus have the intention to be entrepreneurial, however material things are not the only indicator of success. It is important to make a distinction between detrimental materialism and instrumental materialism whose objective is to make a person's life with more meaningful. University lecturers, parents, non-governmental organisations and government should support attitudes that can motivate people to work harder in order to improve their purchasing and living standards. This can enhance the

need to achieve and the need to succeed (instrumental materialism) of university students. However, actions should also be taken to discourage detrimental materialism through educational and literacy campaigns.

15 Limitations and areas for further research

The study focused on business students at a university in South Africa. Therefore, care should be exercised in generalising the findings of this study. Further studies can expand the data collection to more South African universities and more faculties. In addition, a longitudinal study can examine the level of materialism of students when they enter the university and graduate from the university.

References

1. Ajzen, I. 1991. The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes* 50: 179-211.
2. Ashley-Cotleur, C; King, S; and Solomon, G. 2009. Parental and gender influences on entrepreneurial intentions, motivations and attitudes. [Online] Available at: <http://usasbe.org/knowledge/proceedings/proceedings> (accessed on 20 June 2015).
3. Beeka, B.H; and Rimmington, M. 2011. Entrepreneurship as a career option for African youths. *Journal of Development Entrepreneurship* 16(1):145-164.
4. Belk, R. W. 1985. Materialism: traits aspects of living in the material world. *Journal of Consumer Research* 12: 265-280.
5. Belk, R.W. 1984. Possessions and the extended self. *Journal of Consumer Research*, 11: 139-168.
6. Bevan-Dye, A.L; and Surujlal, J. 2011. Attitude towards materialism in sport and materialism tendencies amongst black generation Y students. *African Journal for Physical, Health Education, Recreation and Dance* 1: 43-55.
7. Bevan-Dye, A.L; A Garnett, A; and de Klerk, N. 2012. materialism, status consumption and consumer ethnocentrism amongst black generation Y Students in

- South Africa. *African Journal of Business Management* 6(16): 5578-5586.
8. Britton, E. 2010. Consumption: new key to Chinese growth. *The China Business Review* 37: 26-30.
 9. Brouskeli, V; and Loumakou, M. 2014. Materialism, stress and health behaviors among future educators. *Journal of Education and Training Studies* 2(2): 145-150.
 10. Burns, D.J; and Gupta, P.B. 2014. The meaning of money and possessions: a cross university comparison. *Atlantic Marketing Journal* 3(1): 74-90.
 11. Centre for Development and Enterprise. 2013. Graduate unemployment in South Africa: A much exaggerated problem. [Online] Available at: sun025.sun.ac.za/.../Graduate_Unemployment_In_South_Af (accessed on 20 June 2015).
 12. Chaplin, L.N; and John, D.R. 2010. Interpersonal influences on adolescent materialism: a new look at the role of parents and peers. *Journal of Consumer Psychology* 20: 176-184.
 13. De Witte, H; Rothmann, S; and Jackson, T.B. 2012. The psychological consequences of unemployment in South Africa. *South African Journal of Economic and Management Sciences* 15(3):235-252.
 14. Duh, H.I. 2015. Antecedents and consequences of materialism: an integrated theoretical framework. *Journal of Economics and Behavioural Studies* 7(1): 20-35.
 15. Ediagbonya, K. 2013. The roles of entrepreneurship education in ensuring economic empowerment and development. *Journal of Business Administration and Education* 4(1): 35-46.
 16. Farouk, A; Ikram, A; and Sami, B. 2014. The influence of individual factors on the entrepreneurial intention. *International Journal of Managing Value and Supply Chains* 5(4):47-57.
 17. Fatoki, O. (2014). The entrepreneurial intention of undergraduate students in South Africa: the influences of entrepreneurship education and previous work experience. *Mediterranean Journal of Social Sciences* 5(7): 294-299.
 18. Felix, R.; Ahmed, Z.U; and Hinck, W. 2013. Gender issues in consumer materialism: the case of Mexico. *Journal of Transnational Management* 18: 82-100.
 19. Flouri, E. 2004. Exploring the relationship between mothers' and fathers' parenting practices and children's materialist values. *Journal of Economic Psychology* 25: 743-752.
 20. Ger, G; and Belk, R.W. 1996. Cross-cultural differences in materialism. *Journal of Economic Psychology* 17: 55-77.
 21. Gerba, D.T. 2012. Impact of entrepreneurship education on entrepreneurial intentions of business and engineering students in Ethiopia. *African Journal of Economic and Management Studies* 3(2): 258-277.
 22. Jacobs, G; and Smit, E. 2011. Can materialism explain indebtedness among low-income consumers in South Africa? A study suggests the causes may be more complex. *Leaders' Lab* 1-5.
 23. Handa, M; and Khare, A. 2013. Gender as a moderator of the relationship between materialism and fashion clothing involvement among Indian youth. *International Journal of Consumer Studies* 37(1): 112-120.
 24. Herrington, M; Kew, J; and Kew, P. 2015. Global entrepreneurship monitor South African report. [Online] Available at: <http://www.gemconsortium.org/country-profile/108>. (accessed on 3 August 2015).
 25. Hidayat, A; and Diwasasri, A.H. 2013. Factors influencing attitudes and intention to purchase counterfeit luxury brands among Indonesian consumers. *International Journal of Marketing Studies* 5(4): 143-151.
 26. Hudders, L; and Pandelaere, M. 2012. The Silver Lining of Materialism: The Impact of Luxury Consumption on Subjective Well-Being. *Journal of Happiness Studies* 13: 411-437.
 27. International Labour Organisation 2015. World employment social outlook. [Online] Available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_337069.pdf (accessed on 25 July 2015).
 28. Jacobs, G; and Smit, E. 2010. Materialism and indebtedness of low income consumers: Evidence from South Africa's largest credit granting catalogue retailer. *South African Journal of Business Management* 41(4): 11-32.
 29. Jaroenwanit, P; Supasarn, C; and Deeboonmee, S. 2015. The influence of materialistic attitudes and material values on customers' intention to buy property in Thailand. *A Multidisciplinary Journal of Global Macro Trends* 4(1):31-50.
 30. Kamineni, R. 2005. Influence of materialism, gender and nationality on consumer brand perceptions. *Journal of Targeting, Measurement and Analysis for Marketing* 14(1): 25-32.
 31. Karabati, S; and Cemalcilar, Z. 2010. Values, materialism, and well-being: a study with Turkish university students. *Journal of Economic Psychology* 31: 624-633.
 32. Kautonen, T; Van Gelderen, M; and Erno, T.T. 2013. Predicting entrepreneurial behaviour: a test of the theory of planned behaviour. *Applied Economics* 45(6): 697-707, 2013.
 33. Kwan, C.W. 2013. The relationship between advertising and the level of materialism among adolescents in Hong Kong. *Discovery – SS Student E-Journal* 2:68-89.
 34. Likitapiwat, T; Sereetrakul, W; & Wichadee, S. 2015. Examining materialistic values of university students in Thailand. *International Journal of Psychological Research* 8(1): 109-118.
 35. Luiz, J; and Mariotti, M. 2011. Entrepreneurship in an emerging and culturally diverse economy: a south african survey of perceptions. *South African Journal of Economic and Management Sciences* 14(1): 47-65.
 36. Malebana, M.J; and Swanepoel, E. 2015. Graduate entrepreneurial intentions in the rural provinces of South Africa. *Southern African Business Review* 19(1): 89-111.
 37. Ngugi, J.K; Gakure, R.W; Waithaka, S.M; and Kiwara, A.N. 2012. Application of Shapero's model in explaining entrepreneurial intentions among university students in Kenya. *International Journal of Business and Social Research* 2(4): 125-148.
 38. Norris, J.R; Krueger, F; and Carsrud, A.L. 2010. Entrepreneurial intentions: applying the theory of planned behaviour. *Entrepreneurship & Regional Development: An International Journal* 5(4): 315-330.
 39. Nunnally, J.C. 1978. *Psychometric theory*. New York: McGraw-Hill.

40. Oluwajodu, F; Blaauw, D; Greyling, L; and Kleynhans, E.P.J. 2015. Graduate unemployment in South Africa: perspectives from the banking sector. *South African Journal of Human Resource Management* 13(1): 1-9.
41. Peters, R; and Naicker, V. 2013. small medium micro enterprise business goals and government support: a South African case study. *South African Journal of Business Management* 44(4): 13-24.
42. Pruett, M; Shinmar, R; Toney, B; Llopis, F; and Fox, J. 2009. Explaining entrepreneurial Intentions of university students: a cross-cultural study. *International Journal of Entrepreneurial Behaviour and Research* 15(6): 571-594.
43. Richins, M.L; and Dawson, S. 1992. A Consumer values orientation for materialism and its measurement: scale development and validation. *Journal of Consumer Research* 19:303-316.
44. Richins, M.L. 2004. The material values scale: measurement properties and development of a short form. *Journal of Consumer Research* 31(1): 209-219.
45. Richins, M.L. 2011. Materialism, transformation, expectation, and spending: implication for credit use. *Journal of Public Policy and Marketing* 30(2): 141-156.
46. Roberts, J. A; and Clement, A. 2006. Materialism and satisfaction with over-all quality of life and eight life domains. *Social Indicators Research* 82: 79-92.
47. Segal, B; and Podoshen, J.S. 2013. An examination of materialism, conspicuous consumption and gender differences. *International Journal of Consumer Studies* 37(2), 189-198.
48. Shafique, O; Tanveer, M.A.; Akbar, S; and Rizvi, S. 2013. Intention of business graduate and undergraduate to become entrepreneur: a study from Pakistan. *Journal of Basic and Applied Scientific Research*,3(1): 718-725.
49. Shapero, A; and Sokol, L. 1982. The social dimensions of entrepreneurship. In C.A. Kent, D.L. Sexton, & K.H. Vesper (Eds.) *Encyclopedia of Entrepreneurship*. Englewood Cliffs: Prentice Hall.
50. Sidhu, J.K; and Foo, K.H. 2015. Materialism: the road to happiness and life satisfaction among Singaporeans. *Journal of Happiness and Well-Being* 3(1): 77-92.
51. Sirgy, M.J; Grel-Atay, E; Webb, D; Cicic, M; Husic, M; Herrmann, A; Hegazy, I; Lee, D.J; & Johar, J.S. 2011 . Linking advertising, materialism, and life satisfaction. *Social Indicators Research* 107(1):79-101.
52. Statistics South Africa 2015. Labour force survey. [Online] Available at: <http://www.tradingeconomics.com/south-africa/unemployment-rate>.(accessed on 5 August 2015).
53. Teik, D.O.L; Kamaruddin, A.K; Bulathsinalage, C.N; and Seneviratne, L.A. 2013. The influence of materialistic and ethical values on the purchase intention of counterfeit luxury goods: the case of Malaysian undergraduates. *Journal of Marketing Research & Case Studies* 1-15.
54. Tshikovhi, N; and Shambare, R. 2015. entrepreneurial knowledge, personal attitudes, and entrepreneurship intentions among South African Enactus students. *Problems and Perspectives in Management* 13(1): 152-158.
55. Van Gelderen, M; Brand, M; Van Praag, M; Bodewes, W; Poutsma, E; and Van Gils, A. 2008. Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International* 13(6): 538- 559.
56. Watchravesringkan, K. 2012. Cross-cultural equivalence of materialistic values scale (mvs): an exploratory study between the United States and Thailand. *Journal of Targeting, Measurement and Analysis for Marketing* 20: 235-253.
57. Workman, J.E; and Lee, S.H. 2011. Materialism, fashion consumers and gender: a cross-cultural study. *International Journal of Consumer Studies* 35(1): 50-57.
58. Wu, J. 2009. Entrepreneurial Orientation, Entrepreneurial Intent and New Venture Creation: Test of a Framework in a Chinese Context. [Online] Available at :<http://scholar.lib.vt.edu/theses/available/etd07142009160704/unrestricted/JinpeiWu.pdf> (accessed on July 1 2015).
59. Zampetakis, L.A; and Moustakis, V. 2006. Linking creativity with entrepreneurial intentions, a structural Approach. *The International Entrepreneurship and Management Journal*, 2(3): 413-428.

HARMONIZING THE SECURITIES ACTS OF THE CARIBBEAN COMMUNITY

Annette C. Borel*

Abstract

The Caribbean Community Council for Finance and Planning (COFAP), at its Twelfth meeting held in March 2008, decided that a major element of the integration programme for capital markets should be the formulation of a uniform securities law for adoption by Member States. At the meeting of COFAP, the adoption of a uniform securities law was viewed as one of the measures to further the development and integration of the capital markets in the Community in accordance with Article 44.1(d) of the Revised Treaty of Chaguaramas. This article seeks to explore some of the issues of which regional policymakers must be cognizant in the quest to implement harmonized Securities Acts in Member States, and offers a more pragmatic approach to achieving harmonization.

Keywords: Capital Markets, Securities Law, Policymakers

*Apartment 13, Building 17, Savannah Villas, Aranguez, Trinidad, W.I.
Tel: 868-674-5931, 868-398-6545
Fax: 868-674-5931

1 Introduction

The Caribbean Community ('CARICOM' or 'the Community')⁷ Council for Finance and Planning (COFAP),⁸ at its Twelfth meeting held in March 2008, decided that a major element of the integration programme for capital markets should be the formulation of a uniform securities law for adoption by Member States. At the meeting of COFAP, the adoption of a uniform securities law was viewed as one of the measures to further the development and integration of the capital markets in the Community in accordance with Article 44.1(d) of the Revised Treaty of Chaguaramas ('the Revised Treaty').⁹

⁷ See, Caribbean Community (CARICOM) Secretariat, 'History of the Caribbean Community (CARICOM)' <<http://www.caricom.org/jsp/community/history.jsp?menu=community&prmf=1>> accessed 20 October 2015

The Member States of the Caribbean Community are: Antigua and Barbuda; The Bahamas; Barbados; Belize; Dominica; Grenada; Guyana; Haiti; Jamaica; Montserrat; Saint Lucia; St. Kitts and Nevis; St. Vincent and the Grenadines; Suriname; and Trinidad and Tobago.

⁸ The Council for Finance and Planning (COFAP) is an Organ of CARICOM and consists of Ministers designated by Member States (usually finance ministers). COFAP has primary responsibility for economic policy co-ordination and financial and monetary integration of Member States. See, Caribbean Community (CARICOM) Secretariat, Revised Treaty of Chaguaramas (2001) arts 10 and 14 <http://www.caricom.org/jsp/community/revised_treaty.jsp?menu=community> accessed 3 October 2015

⁹ In 1989 the Heads of Government of Member States of CARICOM made the decision to transform the Common Market into a single market and economy in which factors move freely as a basis for internationally competitive production of goods and provision of services. It was also decided that for the transformation to take place, the Treaty of

The word 'uniform' suggests that all the Securities Acts of Member States are expected to be the same, adopted in similar mode as the Eastern Caribbean sub-region, where the eight territories that comprise the Eastern Caribbean Currency Union, have signed an agreement to provide for the regulation of the Eastern Caribbean securities markets utilizing a common Securities Act.¹⁰ The Revised Treaty contains several articles which require Member States to adopt harmonized laws and policies to further the integration movement. The Revised Treaty, however, does not elucidate how the Securities Acts are to be harmonized. It therefore, behoves the Region's policy makers, in both their national and regional capacities, to chart the way forward.

The decision by COFAP to adopt a uniform securities law is precipitous, as the factors which will drive the convergence process have not been

Chaguaramas would have to be revised. The Revised Treaty of Chaguaramas Establishing the Caribbean Community Including the CARICOM Single Market and Economy was signed by Heads of Government of the Caribbean Community on July 5, 2001 at their Twenty-Second Meeting of the Conference in Nassau, The Bahamas. <http://www.caricom.org/jsp/community/revised_treaty.jsp?menu=community> accessed 3 October, 2015

¹⁰ The Eastern Caribbean Securities Regulatory Commission Agreement was signed by Anguilla, Antigua and Barbuda, Commonwealth of Dominica, Grenada, Montserrat, St Kitts and Nevis, Saint Lucia, and St Vincent and the Grenadines in 2000 and passed into law in 2001 as a schedule to the Common Securities Act of the region. Eastern Caribbean Securities Regulatory Commission (2014) <[file:///C:/Users/owner/Downloads/1401393505_ECCBLIB-%23646324-v1-ECSRC_Information_Booklet%20\(1\).PDF](file:///C:/Users/owner/Downloads/1401393505_ECCBLIB-%23646324-v1-ECSRC_Information_Booklet%20(1).PDF)> accessed 18 October 2015

thoroughly examined to ascertain whether such a goal is achievable. The long and protracted movement towards a Caribbean Single Market and Economy (CSME) suggests that the adoption of a uniform Securities Act may not be achievable as national interests usually take precedence over Community objectives. This article seeks to explore some of the issues of which regional policymakers must be cognizant in the quest to implement harmonized Securities Acts and offers a more pragmatic approach to achieving harmonization.

2 Harmonization

What therefore does 'harmonization' entail? Alastair Hudson, eminent UK Professor of Law and author of several authoritative legal texts, writing on the European securities markets elucidates:

The word "harmonization" could mean either "equalization", in the sense of making all of the securities regulation of each Member State exactly the same; or merely "approximation", in the sense of bringing those securities regulations closer together without needing to make them identical.¹¹

Harmonization of Caribbean Securities Acts, from a practical perspective, means the adoption by Member States of common rules or standards regarding, *inter alia*: the authorization of issuers and securities; disclosure standards, including prospectus disclosure rules; standards for licensing securities market intermediaries; and risk mitigation strategies such as provision for insurance coverage and contingency funds. These matters involve cross jurisdictional issues, particularly those relating to mutual recognition where two or more States accept each other's regulations and supervisory capacity as adequate and a substitute for its own,¹² and also, issues concerning the enforcement of securities laws.

3 Some Features of Caribbean Securities Laws

Caribbean Securities Acts are composites of laws from several jurisdictions including the provincial laws of Canada, the Securities Acts of the United States of America and the securities laws of the United Kingdom. This feature has resulted in divergent and fragmented securities laws in the Community as the laws have not been uniformly adopted in Member States. Thus for instance, an issuer wishing to raise capital in two or more Member States will have to

observe different disclosure standards as the reporting obligations vary from Member State to Member State. The differences in disclosure standards in Member States' Securities Acts are further complicated by variations in the exemption provisions. The lack of consistency also results in regulatory arbitrage which is inconsistent with a core objective of securities regulation, i.e., ensuring that securities markets are fair, efficient and transparent. The absence of consistency also increases transactional costs as participants must seek interpretive guidance in order to achieve a reasonable degree of comfort.

There are also acknowledged conflicts in the legislative provisions governing takeovers and mergers. The differences in securities laws and associated legislation of Member States have been the subject of conflicts between parties to transactions which have led to litigation, as happened a few years ago, when takeover bids were made for Barbados Shipping and Trading Ltd., a company incorporated in Barbados and listed on both the Trinidad and Tobago and Barbados stock exchanges, by Neal and Massy Holdings Limited and ANSA McAl, both incorporated in Trinidad and Tobago. These inconsistencies in the legislative provisions increase transactional costs and lead to market inefficiencies.

Amendments to associated legislation, such as the Companies Acts, have also not kept pace with the development of securities markets and the ubiquitous use of technology in the conduct of securities transactions. One example is the rules governing the transfer of shares. The provisions in Securities Acts addressing clearance and settlement facilities presume that securities are fungible and that transfers will be undertaken in a dematerialized environment. Many of the Companies Acts were drafted prior to the introduction of centralized clearance and settlement facilities and the legislative provisions are based on the presumption that there will be a physical transfer of paper certificates rather than transfers by electronic entries. The provisions in the Companies Acts must be revised to address the inconsistencies.

4 Regional Cooperation

There have been attempts at functional cooperation by securities regulators through the efforts of the Caribbean Group of Securities Regulators (CGSR) which convened its first meeting in 2004 in Port of Spain, Trinidad. The CGSR meets annually to discuss matters affecting the Region's capital markets and to chart a regional approach to offering solutions to the challenges affecting the Region's capital markets. The CGSR met most recently in April 2015 in Jamaica under the theme, Capital Market Development and the Role of Financial Inclusion 'to share successful experiences and provide a forum for the exchange of information, analysis, discussion and realization of ideas that allows the Region to advance decisively in

¹¹ Alastair Hudson, *Introduction to UK Securities Law*, 16 <<http://www.alastairhudson.com/companylaw/Company%20Law%20-%20Securities%20Law%20Text.pdf>> accessed 2 June 2014

¹² See, Pierre-Hugues Verdier, 'Mutual Recognition in International Finance' *Harvard International Law Journal* (Winter 2011) vol 52, No1, 56, 63 <http://www.harvardilj.org/wp-content/uploads/2011/02/HILJ_52-1_Verdier.pdf> accessed 6 November 2014

promoting economic citizenship', among other things.¹³

Perhaps the CGSR's most significant achievement to date is the execution by some of the regulators, of a Multilateral Memorandum of Understanding for the Exchange of Information, Co-operation and Consultation (MMOU) in April 2014 in Bridgetown, Barbados.¹⁴ The Barbados Financial Services Commission, the Eastern Caribbean Securities Regulatory Commission, the Financial Services Commission of Jamaica and the Trinidad and Tobago Securities and Exchange Commission signed the MMOU which is intended 'to enhance the existing working relationship between the Commissions and to improve the effective regulation and co-operation amongst Commissions as it relates to the supervision and oversight of cross-border transactions and initiatives'.¹⁵ The execution of the Memorandum furthers regional efforts at functional cooperation among the Member States of CARICOM and represents another step towards regional integration.

Other efforts at functional cooperation by the CGSR include the 2009 initiative, supported by CARTAC, the IMF Regional Technical Assistance Center based in Barbados, to develop a Regional Take-Over Code to address the challenges experienced in cross-jurisdictional mergers and takeovers. Though the draft Code was agreed by the CGSR, there appears to be some lethargy in its implementation as the Code is yet to be enacted or incorporated in the securities laws of the Member States of CARICOM. Notwithstanding, the collaborative process adopted by the Region's regulators represents a first step towards a coordinated approach, aimed at resolving conflicts in Take-Over rules.

5 Regional Initiatives

The efforts at achieving regulatory reform by regional policy makers, particularly in the area of financial services, can be described as lethargic. One only has to examine the considerations which drove the passage of the most recent Securities Acts in the Caribbean where legislative changes were made in response to external pressures—driven by the overriding objective of satisfying the reform agenda set by international agencies and accompanied by threats and possible sanctions.

It is generally known that international agencies utilize a number of coercive tools to compel States to

comply with their reform agenda. These tools include naming and shaming and countermeasures, such as capital market sanctions, expulsion from regulatory groupings and withholding of financial assistance. An example is the motivation which drove the passage of the Jamaica Securities (Amendment) Act, of 2013 and related legislation. The passage was driven by an IMF conditionality which mandated that amendments to the Securities Laws be made 'to make less risky business models available' and 'to establish a comprehensive framework for the regulation of Collective Investment Schemes' in exchange for financial support.¹⁶

In Trinidad and Tobago, the revision of the Securities Industry Act commenced in January 2003 and a new Securities Act was proclaimed with some urgency in December 2012, ten years later. The urgency in the proclamation of the Trinidad and Tobago Securities Act in December 2012 was driven by external pressures, to ensure that the country became compliant with the terms of the IOSCO MMOU for Consultation, Cooperation and the Exchange of Information by January 01, 2013, the deadline set by IOSCO. There was also an implicit threat of measures which could have affected Trinidad and Tobago Securities and Exchange Commission's continued participation on the Inter-American Regional Committee of IOSCO and the Commission's ability to take part in other policy making deliberations.

Even though the Parliament of Trinidad and Tobago recognized that there were significant deficiencies in the Securities Bill, the requirement to achieve IOSCO 'signatory status' by January 01, 2013 drove the process and the Senate, notwithstanding the acknowledged flaws in the Bill, agreed to the passage of the new Securities Act on the condition that the Government give an undertaking to submit amendments within six months of the date of proclamation. Notably, that deadline was not met as the first reading of the Securities Amendment Bill 2013 took place in the Senate on January 14, 2014, one year later.

Another example of the Region's lethargy in implementing regional decisions is the delayed launch of the Caribbean Exchange Network (the CXN). In spite of significant expenditure and numerous attempts at start-up over the past eight years, the CXN is yet to be operationalized and it now appears to have been abandoned by its proponents. Work on the establishment of the CXN commenced in 2004 with the objective of inter-connecting the securities exchanges in Barbados, Jamaica and Trinidad and Tobago to create a common securities market through the electronic linkage of trading platforms. Some of the issues which have hindered its implementation are: lack of uniformity in the legal frameworks among the

¹³ Jamaica Financial Services Commission, 'Capital Market Development and the Role of Financial Inclusion'(2015) <<http://www.fscjamaica.org/fsc-news/news-articles/news-382.html>> accessed 1 June 2015

¹⁴ *Multilateral Memorandum of Understanding between the Commissions for the Exchange of Information and Cooperation and Consultation* (2014) <<http://www.ttsec.org.tt/content/Executed%20MMoU%20-CGSR.pdf>> accessed 1 June 2015

¹⁵ Id 2

¹⁶ See, International Monetary Fund, *IMF Country Report* (2014) No. 14/85 <<http://www.imf.org/external/pubs/ft/sr/2014/cr1485.pdf>> accessed 10 June 2014

Members States governing self-regulatory organizations; unequal and conflicting disclosure standards; and issues concerning mutual recognition of broker registration requirements.

The failure to establish a single regional securities exchange may be partly due to a perceived lack of interest shown by The Eastern Caribbean Securities Exchange which has been promoting what it believes to be the superiority of its own trading platform and the apparent reluctance of the three securities exchanges (mentioned above) to concur.

We also have the experience of the long and protracted delay in executing the CARICOM Financial Services Agreement. As far back as February 2004, in Port-of-Spain, Trinidad, a Regional Working Group on Financial Services Policy Harmonization convened to discuss and review a draft Agreement. Since then there have been numerous and protracted efforts aimed at finalizing the terms of the Agreement. The Agreement is yet to be executed despite the Ministers of Finance having approved the draft CARICOM Financial Services Agreement for finalization and signature by Member States at the Fifteenth Meeting of COFAP held on August 07, 2013.

6 Whither Harmonized Securities Acts?

The several failed attempts at launching the CXN, as well as the prolonged and protracted negotiations by COFAP, *et al* to agree to the terms of the CARICOM Financial Services Agreement suggest that any attempt at the adoption of a uniform securities law by the Community will be challenging. Moreover, if consensus on the provisions of a uniform securities law is ever arrived at, there is the added challenge of having to amend that document at future points in response to evolving financial markets and inevitable crises. These considerations do not augur well for finalization in the near term of a uniform Securities Act for the Caribbean Community.

The question which should now be posed is, how can the securities laws of Member States be harmonized so that the objectives of the Revised Treaty and the establishment of a single market are realized? There are two principal approaches which can be utilized to achieve harmonization of the securities laws. Member States can work towards the adoption of a uniform securities law as agreed at the 12th Meeting of COFAP; alternatively, Member States can work towards achieving ‘approximation’ of the securities laws. The former is static and likely to be frustrated as success is achievable only on completion and approval of a uniform law by the Member States, whereas with the latter, the approach is dynamic and the execution of each event in the process symbolizes success.

The Community’s history suggests that if the first approach is embraced, the process will be protracted and will take an inordinate period of time to

achieve consensus.¹⁷ Moreover, in the path to arriving at consensus, financial markets and standards will be evolving and it will become necessary to amend the regulatory response, further delaying the adoption of a uniform securities law. Additionally, if agreement on the provisions of a uniform securities law is ever arrived at, it will become necessary to amend the law at future points as financial markets are constantly developing. It is therefore more pragmatic to pursue a coordinated approach which embraces ‘approximation’ of the securities laws as this involves a more flexible approach to harmonization and is based on the adoption of minimum standards with a focus on specific areas which impact cross-jurisdictional activities.

7 Role of Heads of Government and COFAP

The Revised Treaty sets out the broad policy direction for the sector and the role of the Organs and Bodies of CARICOM. The principal Organs of CARICOM are the Conference of Heads of Government and the Community Council of Ministers.¹⁸ They are assisted in financial and monetary matters by COFAP.¹⁹ COFAP has primary responsibility for economic policy co-ordination and financial and monetary integration of Member States including, promoting the establishment and integration of capital markets in the Community.²⁰ The principal Organs of CARICOM assisted by COFAP determine the policy direction for the financial sector in the Community. The challenge is to determine how the policy directives, these broad high level principles are translated into both Community and municipal laws. This task is best addressed by regional sectoral standard setters such as the Caribbean Group of Securities Regulators and the competent authorities of Member States.

8 A Snapshot of the Process in the European Union

It is worthwhile at this point to briefly review the harmonization of securities laws in the European Union. ‘The EU has only achieved “approximation” [of its securities laws] through the establishment of minimum standards of regulation across the EU precisely because the securities directives grant Member States the power to create more stringent

¹⁷ Following the decision by COFAP in March 2008, the CARICOM Secretariat in late 2010 engaged a consulting firm to formulate a programme for the further development and integration of capital markets in the Caribbean Community including proposals for the design of an appropriate CARICOM Securities Law. Following a series of consultations, a draft Law was submitted to the Secretariat in 2011. The draft was circulated to Member States for feedback in 2014. No further progress has been reported.

¹⁸ RTC, art 10.1

¹⁹ RTC, art 10.2

²⁰ RTC, art 14.2

rules than are contained in the directives.²¹ The Consolidated Admission and Reporting Directive ('CARD') is intended to promote "the co-ordination" of the securities laws of member states²² without necessarily making them uniform. 'CARD's implementation takes account of the "present differences in the structures of securities markets in Member States" so as to enable member states to take into account "any specific situations with which they may be confronted".²³ The laws 'are based on a minimum level of regulation in all Member States that would permit the movement of approvals to be passported in time between Member States.'²⁴

9 A Two-Pronged Process

In light of the conflicts which exist between Community objectives and national interests, it is recommended that a coordinated approach to implementation be adopted by the Community. Convergence of securities laws can be achieved utilizing a two-pronged approach, starting with the involvement of the CARICOM Secretariat which should be tasked with the responsibility for developing a model Securities Bill for the Community. This model Bill will serve as the blueprint and will act as a guide for each Member State in the revision of its national Securities Act. Recognizing, however, the challenges in implementing a uniform Act throughout the Community, a collaborative approach that focuses on the development of minimum standards should be adopted. This assignment should be delegated to the Caribbean Group of Securities Regulators (CGSR).

10 Role of the CGSR

The lead in the development of minimum standards for the securities sector must be taken by the CGSR. The CGSR is an established network of regulators within the Community and best situated to move the integration process to the next stage. The formulation of minimum standards for the sector should begin with the engagement of industry stakeholders, those familiar with industry practices. Stakeholder involvement is imperative as the imposition of standards on the Community without the participation of those that will be affected is likely to result in a lack of ownership and buy-in.²⁵ Having developed minimum standards, these draft standards should be referred to the College of Regulators²⁶ which will play

a coordinating role, ensuring that the proposals are not inconsistent with the regulatory policies of other financial services regulators. This approach is consistent with the terms of the Liliendaal Declaration on the Financial Sector, which declares the need for closer collaboration among supervisory authorities.²⁷

11 Transparency and Consultation

The decision of the Caribbean Court of Justice (CCJ) in the case of *Myrie v Barbados*²⁸ underscores the need for increased transparency in the work of the Organs and Bodies of CARICOM. In the *Myrie* case, a decision of the Conference of Heads of Government regarding an 'automatic stay' of six months in Member States,²⁹ and which is recorded in a draft report, was relied upon and ruled by the CCJ as valid and binding on the Community. The CARICOM Secretariat also has to play a more direct role in the consultative process at both national and regional levels as the current system which delegates a significant amount of responsibility to Member States is too reliant on the discretion of the competent authorities and results in information asymmetries. It is recommended that the CARICOM Secretariat adopt a process of consultation at each stage using appropriate ICT to gain the widest participation and feedback. This will allow the Organs and Bodies of CARICOM the opportunity to hear the views of interested persons who do not belong to stakeholder groups customarily recognized by the competent authorities. This consultative process is essential as the proposed rules will impact on the wider investment public.

established. Caribbean Community (CARICOM) Secretariat, 'Liliendaal Declaration on the Financial Sector (New Framework for Financial Regulation and Supervision in the Region)' (2009)
<http://www.caricom.org/jsp/communications/meetings_state_ments/liliendaal_declaration_financial_sector.jsp>
accessed 26 June 2014

²⁷ The Liliendaal Declaration was made by Heads of Government of CARICOM at the Thirtieth Meeting in July 2009 following the 'negative fallout' from the global financial and economic crisis. The Declaration seeks to outline a coordinated and integrated approach to the regulation, supervision and oversight of the financial services sectors in the Community. Id

²⁸ *Myrie v Barbados* [2013] CCJ 3 (OJ), (2013) 83 WIR 104

²⁹ Draft Report of the Twenty-Eight Meeting of the Conference of Heads of the Caribbean Community, at that meeting: THE CONFERENCE

AGREED that all CARICOM nationals should be entitled to an automatic stay of six months upon arrival in order to enhance their sense that they belong to, and can move in the Caribbean Community, subject to the rights of Member States to refuse undesirable persons entry and to prevent persons from becoming a charge on public funds.

Cited in *Myrie v Barbados*, [2013] CCJ 3 (OJ), (2013) 83 WIR 104 [43]

At para 47, (The CCJ also took note that the Conference, the CARICOM Secretariat and the various Organs of the Community all regarded and treated the 2007 Conference Decision as valid and binding.)

²¹ Hudson (n 5) 16

²² Id 16

²³ Id 17

²⁴ Id 19

²⁵ See, Chris Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (Cambridge 2012) 191

²⁶ Caribbean Community (CARICOM) Secretariat, Liliendaal Declaration on the Financial Sector (New Framework for Financial Regulation and Supervision in the Region), at paragraph 3, seeks to establish a College of Regulators. The College of Regulators has, however, to date not been

12 Establish Office of International Affairs

A key component to the success of the proposed matrix is the provision of adequate resources at a national level to drive the integration process forward. The competent regulatory authorities should establish an 'office of international affairs' or at a minimum, designate an individual to spearhead cooperation efforts with regional and international bodies.³⁰ Coupled with the recruitment of trained personnel, is the need to establish systems for the development and retention of institutional knowledge and the management and dissemination of information. The harmonization of Caribbean Securities Acts must have the attention of committed technocrats whose role is to drive the integration process in a focused and systematic way.

13 Conclusion

Given the considerations involved in its development and adoption, it is unlikely that a uniform securities law will be successfully adopted and implemented in the Member States of CARICOM. Regional policy makers should therefore focus on achieving approximation of the securities laws and ensuring that securities regulators and other standard setters are equipped with the resources to formulate minimum standards for the securities sector in the Community. The Revised Treaty³¹ creates a valid and binding obligation on the Community to harmonize the securities laws, and in light of the CCJ's rulings in *Hummingbird Rice Mills v Suriname and the Caribbean Community*³² and *Myrie v Barbados*³³ it

becomes even more urgent that Member States adopt minimum standards for the realization of harmonized securities laws.

References

1. Caribbean Community (CARICOM) Secretariat, 'History of the Caribbean Community (CARICOM)' <<http://www.caricom.org/jsp/community/history.jsp?menu=community&prnf=1>> accessed 20 October 2015
2. Caribbean Community (CARICOM) Secretariat, Revised Treaty of Chaguaramas (2001) arts 10 and 14, <http://www.caricom.org/jsp/community/revised_treaty.jsp?menu=community> accessed 3 October 2015
3. Chris Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (Cambridge 2012) 191
4. *Hummingbird Rice Mills Limited v Suriname and the Caribbean Community* [2012] CCJ 1 (OJ) [17], (2012) 79 WIR 448 [17]
5. International Monetary Fund, IMF Country Report (2014) No. 14/85 <<http://www.imf.org/external/pubs/ft/scr/2014/cr1485.pdf>> accessed 10 June 2014
6. Jamaica Financial Services Commission, 'Capital Market Development and the Role of Financial Inclusion' (2015), <<http://www.fscjamaica.org/fsc-news/news-articles/news-382.html>> accessed 1 June 2015
7. Multilateral Memorandum of Understanding between the Commissions for the Exchange of Information and Cooperation and Consultation (2014) <<http://www.ttsec.org.tt/content/Executed%20MMoU%20-CGSR.pdf>> accessed 1 June 2015
8. *Myrie v Barbados* [2013] CCJ 3 (OJ)[55], (2013) 83 WIR 104, [55]
9. Pierre-Hugues Verdier, 'Mutual Recognition in International Finance' *Harvard International Law Journal* (Winter 2011) vol 52, No1, 56, 63 <http://www.harvardilj.org/wp-content/uploads/2011/02/HILJ_52-1_Verdier.pdf> accessed 6 November 2014

³⁰ See Brummer (n 19) 51, where he states that 'Virtually every regulatory agency charged with domestic supervisory responsibilities . . . has instituted an "office of international affairs" to spearhead cooperation efforts with their foreign equivalents.'

³¹ Article 9 of the Revised Treaty states, Member States shall take all appropriate measures, whether general or particular, to ensure the carrying out of obligations arising out of this Treaty or resulting from decisions taken by the Organs and Bodies of the Community. They shall facilitate the achievement of the objectives of the Community. They shall abstain from any measures which could jeopardise the attainment of the objectives of this Treaty.

³² See *Hummingbird Rice Mills Limited v Suriname and the Caribbean Community* [2012] CCJ 1 (OJ) [17], (2012) 79 WIR 448 [17] where the CCJ stated,

There is no doubt that Suriname came under a legal obligation scrupulously to observe all its treaty obligations from 1st January 2006, the date of entry into force of the Revised Treaty. From that date forward, the rule of pacta sunt servanda, enshrined in Article 26 of the Vienna Convention on the Law of Treaties, 1969, became operative: 'every treaty in force is binding upon the parties to it and must be performed by them in good faith.' The State of Suriname was simultaneously bound by Article 9 of the Revised Treaty to take all appropriate measures to ensure the carrying out of its treaty obligations.

³³ In *Myrie v Barbados* [2013] CCJ 3 (OJ)[55], (2013) 83 WIR 104, [55] the CCJ stated, 'in the absence of any indication to the contrary a valid decision of a Community Organ or Body taken in fulfillment or furtherance of the RTC or to achieve the

objectives of the Community is immediately binding at the Community Level.' citing *Hummingbird Rice Mills*, (n 26).

A CRITICAL REFLECTION ON SUBJECTIVITY IN EXAMINATION OF HIGHER DEGREES

Collins C Ngwakwe*

Abstract

This paper is a critical reflection on seemingly embedded subjectivity in external examination of higher degrees. The paper is significant given that education is a vital pillar of sustainable development; hence, identification of obscure obstacles to this goal is imperative for an equitable and sustainable education that is devoid of class, race and gender. Adopting a critical review approach, the paper rummaged some related researches that bemoan apparent subjectivity amongst some examiners of higher degrees. Findings show a regrettable and seemingly obscured subjectivity and/or misjudgement that constitute an impediment in higher degrees examination process. Thus the paper highlights that whilst it is understandable that misjudgement or error is innate in every human endeavour including higher degree examination, however an error caused by examiner's partisanship and/or maladroitness in the research focus may be avoidable. In conclusion, the paper stresses that prejudice or ineptitude in higher degree examination should be bridled by inter alia implementing the policy of alternative assessor; checking the pedigree of examiner's assessment experience and an opportunity for the supervisor/s to present a rebuttal in circumstances where one examiner's opinion is fraught with apparent subjectivity.

Keywords: Examination, Higher Degree, Subjectivity, Bias, Opinion, Examiners, Markers

*Turffloop Graduate School of Leadership, Faculty of Management and Law, University of Limpopo South Africa

1 Introduction

How petrifying – the revered academic behemoth – the thesis marker, prowling behind the dark veil – with two-aged sword of ink, seeking to devour years of hard labour; Severed from companionable – the candidate bemoans in twitchy days of uncertainty

Research on higher degrees examination is embryonic (Bourke & Holbrook, 2013); whilst there are myriad of objective inclinations in each of these nascent researches, this paper takes a nuance perspective by concentrating on a critical reflection of seemingly embedded subjectivity in external examination of higher degrees (Carter, 2008). From time immemorial until the present, higher degree examinations have been shrouded in secrecy and the examiner's decision has largely been revered as sacrosanct (Carter, 2008). The outcome of this seemingly monarchical aura in higher degree examination has not all been rosy for higher institutions and the candidates. Albeit this, higher institutions and powerless candidates have remained docile with unalloyed obeisance to declarations of examiners even in instances when such decisions have been fraught with subjectivity (see example, Carter, 2008; Peters and Ceci, 1982) with attendant anguish and pain to the candidates. Thus the paper highlights that whilst it is understandable that misjudgement or error is innate in every human endeavour including higher degree examination, however an error caused

by examiner's partisanship and/or maladroitness in the research focus may be avoidable. Given apparent subjectivity in higher degrees examination, it is imperative to strengthen independence as a vital ingredient that may bring sanity and objectivity in the examination of higher degrees. Independence should not mean that examiner decisions are inviolable when the need arises such as in cases of subjectivity.

The following hypothetical opinions encapsulate the problem of this paper:

First Assessor: thesis makes an original contribution to knowledge, findings are publishable and should be accepted for the award of a higher degree...

Second Assessor: thesis has not contributed any additional knowledge; none of its findings is publishable and should be rejected (author's creation).

It is in consideration of similar ubiquitous practical findings about divergent opinions in higher degree examiner reports that Carter (2008, p. 366) summarised that higher degree examiner opinions and reports are "idiosyncratic".

If left unresolved, the sharp contrast in the above opinions of two thesis/dissertation examiners may constitute a dilemma for higher degrees' committee decisions on the award of higher degree; or at least, it could delay the committee's timeous decisions and hence a delay to the candidate's well-timed graduation. However, the goal of every university is to

enhance quality and timely graduation of its students, nevertheless this goal may be stalled by some examiners' errors and/or subjectivity if an effective policy on higher degree examination imbued with proper checks and balances is not in place.

Therefore, the objective of this paper is to use relevant literature to engage in a critical reflection of apparent subjectivity or ineptitude in examination of higher degrees. Accordingly, the question that underpins this paper is whether all higher degree examiners' opinions are sacrosanct. Accordingly, the main aim of this reflective paper is to lay a brief critical foundation that may bolster critical empirical research on subjective thesis examination; such future research may likely bring about a positive revolution to the somewhat current mysteriousness in higher degree examination.

The paper is arranged into a simple structure; the next section of the paper presents a critical reflection of the subject matter from extant literature, following this, the paper ends with a conclusion and recommendation.

2 A literature reflection on subjectivity in higher degree examination

Whilst some mottled forms of chasm amongst assessors may occur in higher degree examinations (Holbrook et al. 2004), it becomes frazzling though if one assessor's report is extremely skew and thus an outlier from others. In some instances, it has been found that some assessors' opinion is extremely divergent from other assessors' opinions (see e.g. Lawson, Marsh & Tansley 2003) and at times with a subjective rejection recommendation, which stymies constructive assessment of a research degree and concomitantly constitutes an ostensive thwarting of constructivism and hence academic capacity building. Problems identified as causing extreme and often rejection opinions include *inter alia*, misinterpretation of knowledge production – popularly regarded as original contribution to knowledge, research methodology prowess and publishability of the thesis or dissertation findings. The subsequent paragraphs offer critical discussions on the above contested issues.

Some examiners' subjective comments and/or recommendation seem to emanate from a standpoint where an assessor is stuck within the traditional realm of knowledge production (or contribution to knowledge), which is static and discipline-specific (Gibbons et al. 1994). Hence, it might arise that a dissonance could subsist between an assessor's understanding of what a contribution to knowledge should be and scholarly views about the constituents of an original contribution to knowledge. However, experts believe that original contribution is not static (Gibbons et al. 1994); rather research contribution transcends from a single to an amalgam of a gamut of varied forms of recognised scholarly research

contributions (Gibbons et al. 1994). Some physiognomies of contributions include *inter alia*, a discovery of a gap in knowledge (Glassberg, 2001; Hughes & Hayhoe, 2009); addition of an insight into the knowledge gap (Arnold, 2005); "discovery of new facts or the exercise of independent critical thinking" (Johnston, 1997, p.335). Other evidence of contribution includes appropriateness of thesis material for publication (Johnston, 1997; Arnold, 2005); publication of parts of thesis in refereed journals or conference proceedings in advance of assessment (Petre, 2010); contradiction of current system, a critique of current system, validation or expansion of current system (Petre, 2010). An argument might also arise as to what girth of contribution is significant enough to warrant recognition of a thesis or dissertation. Petre stresses that contribution to knowledge must not be revolutionary to be recognised (Petre, 2010). Adding to Petre's study, other research found that contribution to knowledge is subject-specific, the discipline or subject that the candidate has researched has a profound influence on how the examiner elicits the originality (Clarke & Lunt, 2014);

There are also contestations amongst examiners about which research method is deemed superior, but researchers indicate that there is no single most superior research methodology for all research endeavour (Willer & Walker, 2007), a candidate's demonstration of use of research method depends on the particular research in question. Even from the standpoint of a single research, there may be many methods of investigating a single research. If the researcher demonstrates the ability to justify and follow methodically his/her chosen method (Sankaran, et al. 2005), the examiner should judge the thesis method by immersing himself/herself in the context of the thesis and not by assuming an intransigent posture – expecting the research method to incline in his/her preferred precinct (Sankaran, et al. 2005). A real-life expression of students' expectation from examiners by Sankara et al. (2005) is:

We felt that we had provided internal arguments for the methodological approaches we had taken, and we hoped that our examiners would "get inside" our theses rather than examine us from their own expectations about methods of investigation or their own ideas of what constituted a doctoral thesis. (Sankaran, et al. 2005, p. 825)

There are chances that examiners may read thesis/dissertation from different methodological school of thought – positivist, normative, practitioner etcetera. Under this circumstance, there may be methodological disagreements amongst examiners if one of the examiners is intransigent – hence Sankaran, et al. (2005) eloquently recommends an alternative examiner to read the thesis to save the student from being locked up in an unjustifiable methodological quagmire. There is also subjectivity amongst examiners in reporting whether a thesis or dissertation

is publishable, in the absence of an attached publications to the thesis under examination; this factor may be highly contentious and hence may attract subjective decision by some examiners. Mullins & Kiley (2002) highlight that a thesis containing a significant amount of material may be publishable; although materiality may be idiosyncratic, but one can infer that a thesis containing a number of objectives with corresponding literature and research analysis on these individual objectives is well prepared and suitable for publication.

Aside from other factors, personal idiosyncrasy seems to weigh heavily on subjectivity, as most examiners would expect the thesis method or focus to incline in examiner's preferred precinct (Sankaran et al, 2005; Carter, 2008) which is a detraction from the core objective of the thesis under examination (suggesting apparent intransigent posture). In consideration of apparent and potential intransigent posture of some assessors, the University of Johannesburg (UJ) (2014) prescribes that: "Acceptance of the assessment task does not give the assessor the right to insist on a drastic change of the goals, focus or methodology of the study" (UJ, 2014, p.1). In line with the UJ's stance, Mullins & Kiley, (2002) offers a pertinent narration of experienced assessors' approach to doctoral assessment as:

I try in my reading of theses to understand where the student is coming from. Even if I don't agree with the perspective they have, or if there are gaps, I try to see it from their eyes and whether they have been true to what they set out to do (Mullins & Kiley, 2002, p.375).

Accordingly, an expert cautions that, "Nothing in knowledge production and exploration can be static" (Arnold, 2005, p. 37). Whilst lamenting some assessors' subjectivity, Wellington et al. (2005) bemoans that "some examiners seem to arrive with a bee, or several bees, in their bonnets." (Wellington et al., 2005, p. 13), it is thus disquieting that with a negative and/or parochial posture, an assessor's objectivity may be blurred (Johnston, 1997) to the detriment of the study and the university at large. Not surprising though, the disquiet subsisting in assessments has prompted eminent scholars to rummage the entire gamut of peer reviewing and/or assessments and has unravelled a preponderance of prejudice amongst some reviewers and assessors against some authors because of race or gender (see e.g. Armstrong, 1997; (Mumford, 1983; Wenneras and Wold, 2001; Huang, 2009),. Unfortunately, bias in peer reviews is hardly publicised (Hojat et al. 2004). Similarly, researchers have found an evidence of bias against authors from less prestigious universities (see e.g. Peters and Ceci, 1982). Other scholars discover that in many instances, assessment process "has been strongly biased against 'negative studies', i.e. studies that find an intervention does not work" (Smith, 2006, p. 180). Therefore, if a thesis falls into the hand of an examiner who is apathetic to a study that negatively

analyzes his/her invention, creation, intervention or having some affinity and sympathy with the system studied, it is likely that such a thesis will not receive an objective assessment by some examiners.

3 Conclusion and recommendation

This paper made a brief critical reflection on subjectivity in external examination of higher degrees. Given the acclaimed role of education as a vital pillar of sustainable development, identification of obscure obstacles to this goal is imperative. Using a critical review approach, the paper rummaged some related research that bemoans apparent subjectivity amongst some examiners of higher degrees. The paper finds that subjectivity constitutes an impediment in higher degree examination. Accordingly, the paper highlights that whilst it is understandable that misjudgement or error is innate in every human endeavour including higher degree examination, but an error caused by examiner's partisanship and/or maladroitness about the research may be avoidable. Therefore the paper recommends that subjectivity in higher degree examination should be bridled by inter alia implementing the policy of alternative assessors to replace subjective examiners; checking the pedigree of examiner's experience and an opportunity for the supervisor/s to present a rebuttal in circumstances where examiner's opinion is fraught with unprecedented subjectivity. Additionally, heads of departments should be wary of appointing examiners merely based on the consideration that his/her name echoes in some quarters. This reflective paper presents an avenue for future empirical study that may dwell uniquely on the subjectivity in external examination of higher degrees.

References

1. Armstrong, J. S. (1997). Peer review for journals: Evidence on quality control, fairness and innovation. *Science and engineering ethics*, 3(1), 63-84.
2. Arnold, J. (2005). The PhD in writing accompanied by an exegesis. *Journal of University Teaching & Learning Practice*, 2(1), 36 - 50.
3. Carter, S. (2008). Examining the doctoral thesis: A discussion. *Innovations in Education and Teaching International*, 45(4), 365-374.
4. Clarke, G., & Lunt, I. (2014). The concept of 'originality' in the Ph. D.: how is it interpreted by examiners?. *Assessment & Evaluation in Higher Education*, 39(7), 803-820.
5. Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. (1994). *The new production of knowledge: The dynamics of science and research in contemporary societies*. London: Sage.
6. Glassberg, D. (2001). *Sense of history: The place of the past in American life*. Massachusetts : University of Massachusetts Press.
7. Hojat, M., Gonnella, J. S., & Caelleigh, A. S. (2003). Impartial judgment by the "gatekeepers" of science: fallibility and accountability in the peer review

- process. *Advances in Health Sciences Education*, 8(1), 75-96.
8. Holbrook, A., Bourke, S., Lovat, T., & Dally, K. (2004, November). An investigation of inconsistencies in PhD examination decisions. In *Proceedings of the Australian Association for Research in Education Conference, University of Melbourne*.
 9. Huang, M. H. (2009). Race of the interviewer and the black-white test score gap. *Social Science Research*, 38(1), 29-38.
 10. Hughes, M. A., & Hayhoe, G. F. (2009). *A research primer for technical communication: Methods, exemplars, and analyses*. Routledge.
 11. Johnston, S. (1997). Examining the examiners: an analysis of examiners' reports on doctoral theses. *Studies in higher education*, 22(3), 333-347.
 12. Lawson, A., Marsh, H., & Tansley, T. (2003). Examining the examiners. *Australian Universities*
 13. Mullins, G., & Kiley, M. (2002). 'It's a PhD, not a Nobel Prize': how experienced examiners assess research theses. *Studies in higher education*, 27(4), 369-386.
 14. Mumford, M. D. (1983). Social comparison theory and the evaluation of peer evaluations: A review and some applied implications. *Personnel Psychology*, 36(4), 867-881.
 15. Peters, D. P., & Ceci, S. J. (1982). Peer-review practices of psychological journals: The fate of published articles, submitted again. *Behavioral and Brain Sciences*, 5(02), 187-195.
 16. Petre, M (2010) *the Unwritten Rules of Phd Research*. Maidenhead: Open University Press
 17. Sankaran, S., Swepson, P., & Hill, G. W. (2005). Do research thesis examiners need training?: Practitioner stories. *The Qualitative Report*, 10(4), 817-835.
 18. Smith, R. (2006). Peer review: a flawed process at the heart of science and journals. *Journal of the royal society of medicine*, 99(4), 178-182.
 19. University of Johannesburg (2014) Guidelines for the Assessment of a Doctoral Thesis 2014, available at: <http://tinyurl.com/o4kq3lv> [Accessed July 10 2015]
 20. Wellington, J. J., Bathmaker, A. M., Hunt, C., McCulloch, G., & Sikes, P. (2005). *Succeeding with your Doctorate*. Sage.
 21. Wenneras, C., & Wold, A. (2001). Nepotism and sexism in peer-review. *Women, science, and technology*. Routledge, 46-52.
 22. Willer, D., & Walker, H. A. (2007). *Building experiments: Testing social theory*. Stanford: Stanford University Press.
 23. Bourke, S., & Holbrook, A. P. (2013). Examining PhD and research masters theses. *Assessment & Evaluation in Higher Education*, 38(4), 407-416.

TIME SERIES ANALYSIS OF INTERACTION BETWEEN AGGREGATE EXPENDITURE AND JOB CREATION IN SOUTH AFRICA

Thomas Habanabakize, Paul-Francois Muzindutsi**

Abstract

Jobs are the pillars of the economy and aggregate expenditure is among the key factor used to create an employment stimulating environment. This study scrutinizes the relationship between the component of aggregate expenditure and job creation in South Africa from 1995 to 2014. The Vector Autoregressive (VAR) model and multivariate co-integration approach were employed to examine how household consumption, government, investment and export expenditures affect job creation in South Africa. Findings of this study revealed that there is long-run relationship between aggregate expenditure and job creation with government and investment expenditure being the key determinants of job creation in South Africa. Contrary to priori expectation, consumption and exports do not improve jobs creation in South Africa. In the short-run, there are no significant interactions between components of aggregate expenditure and job creation. This study provided recommendation that may assist in boosting job creation in South Africa.

Keywords: Job Creation, Employment, Aggregate Expenditure, Household Consumption, Co-integration, South Africa

**School of Economics Sciences, North-West University*

1 Introduction

Most of countries around the world are faced high unemployment rate challenge and job creation is one of major concerns for macroeconomic policymakers. The overall view of word “employment or jobs” is that diverse people are working and earning some income in the form of wage or salary in order to satisfy their quotidian needs (Maqbool et al., 2013). Therefore, job creation is required in order to absorb unemployed people. Job creation is the provision of new chances for waged employment, principally for persons who are jobless Davis et al., 1996). The employment or job creation is the increasing global problem, according to the International Labour Organization (2015), within a single year, from 2013 to 2014 global unemployment has increased by 1.2 million. In South Africa, unemployment has been increasing before and after 1994 democracy. From 1994 to 2014, the official narrow unemployment increased from 22 percent to 25 per cent respectively and the expanded unemployment rate was 35% at the end of 2014 (Statics South Africa, 2014). This increase in joblessness affects not only those people who are unemployed but also those who are employed. Schussler (2013) stated that in South African only 60 percent of households depend on their earned income; whilst the remaining 40 percent depends on income received from government through government supports. This proves how joblessness is a serious

issue in South Africa and how job creation is a crucial need for current South African economy. Jobs creation can also be achieved using different strategies and one of them is through boosting spending or expenditure (Cray et al., 2011). The relationship between employment and aggregate expenditure can be better understood using Keynesian expenditure model.

Keynesian aggregate expenditure plays a major role in macroeconomic growth through consumption, investment, government expenditure and net export (Dornbusch et al., 2014) and according Okun’s Law (Okun, 1962), the higher economic growth is, the lower unemployment rate (or the higher employment rate). Aggregate expenditure, other things being constant, leads to higher demand for goods and services (Michaillat and Saez, 2013). Therefore, firms have to hire more labour. Hence, new jobs are created. Those jobs created contribute more to the well-being of the society and stimulate further spending which increases firm’s revenues. When revenues increase, firms are likely to increase investments, consequently creating more jobs in the future. All components of aggregate expenditure tend to be linked and as they all are concomitant to job creation. On one end, demand spending from households, government and foreign markets increases firms production and investments, and in attempt to meet their increased customers’ demand firms to create jobs (Adelino et al., 2014). On the other end, job losses negatively affect demand and

expenditure, lowering companies' investments and thereafter the exports (Bentolila and Ichino, 2000).

This paper aims to analyse how Keynesian aggregate expenditure model can be employed to explain the job creation in South Africa. Therefore the paper analyse the short- and long-run relationships between job creation (employment rate) and household's consumption; government expenditure gross domestic investments and exports.

2 Review of literature

2.1 Household consumption expenditure and job creation

In the Keynesian model employment is well driven by households' consumption. The more households consume, the more goods and services are demanded from firms and the more jobs created (Emilia, 2006). Consumer spending decisions is a key driver of economy; it plays a major role in creating employment and reducing unemployment (Toossi, 2002). All industry activities depend on consumer decisions or behaviour, whether be for short or long term production of good and services. Other things being equal, there is interdependent and positive relationship between consumption and employment (Bantolila and Ichino, 2000). Household's consumption contributes more to the economic growth and as a result, economic growth leads to job creation (Gurgul and Lach, 2011). For example, in 2006 the Chinese macroeconomic authorities chose to increase household's consumption, because a percentage growth in consumption goes hand in hand with growth a percentage growth in employment rate (Lardy, 2006). Although, numerous can be employed to create more jobs in economy, Bentolila and Ichino (2000); Toossi (2002); and Lamo et al. (2007), preconized consumption because it helps in creating employment without causing any other negative effect to the economy.

Notwithstanding, the study done by Schettkat and Salvedra (2004) proved that the relationship between household consumption and job creation depend on many factors. They argue that those factors may cause either a positive or negative relationship, or lead to no relationship between the household consumption and the job creation. Postlewaite et al. (2008) states that a person will make a decision to consume or not based on expected duration of his or her job. Henceforth, permanent jobs tend to increase the level of current consumption whilst part-time and unsecured job will influence saving for the future consumption. Beyond those affirmations of a positive relationship between consumption and the dilemma about that relationship, the study of Loku and Deda (2013) found that in most of developing countries consumption increase is due to the population growth rate. Consequantly, in that case consumption has no positive effect on employment. Other factors that can

increase consumption but reduce jobs are technological changes and increase in consumption of imported goods and services (Autor et al., 2013). There is negative relationship between consumption and job creation in case households increase consumption of imported goods and services. In this case, jobs are created within exporting country instead of domestic country (Toossi, 2002). A study by Emilia (2006) found that, due to the higher consumption of imported goods and services, consumption increase creates joblosses in demostic country.

2.2 Exports and job creation

Considering that import lead to decrease in job creation, the increasing export would stimulate job creation. The quantity of good and services exported depends on many factors such as factors of production, exchange rate and foreigner's level of demand. The more products demanded by foreign markets; the higher production is required from domestic producers (Bobeica et al., 2015). This increase in production leads to an increase in labour demand, thus creating new jobs (Dizaji and Badri, 2014). However, it has been proved by Berger and Martin (2011) that exports do not create jobs in all sectors. It creates jobs in those sectors that use labour (not machines) for production. The positive relationship between exports growth and job creation has been supported by studies by Dizaji and Badri (2014); Aswicahyono et al. (2011).

A study conducted by (Kiyota, 2014) in four OECD countries (China, Japan, Chorea and Indonesia) found that 80 percent of jobs in the manufacturing sector and 60 percent in the non-manufacturing sector in these countries resulted from exportation. Not only exports of goods and services play a major role in job creation, it also prevents job losses for existing employees.

However, it is not always the case that when exports increase, new jobs are created. The study by Kiyota (2011) proved that an increase in Japan's export increased the work-hours for existing employees instead of creating new jobs. Thus, an increase in exports may lead to wages increase instead of creation of new jobs (Said and Elshennawy, 2010) Furthermore, a study by Şeker (2010) which analysed employment protection and exports in 26 countries of Europe and Asia, found a negative relationship between exports and job creation This suggest that if exports are not well managed they can be the source of job losses. Job losses may result in additional costs of selling abroad including the quality and quantity in competitive market (Bernard and Jensen, 1999). The demad for exports can increase, but if existing employees do not have skills for required export products, they may loose their jobs. In addition, Exports being one side of trade, are not the only way to improve jobs.

2.3 Job creation and government and investment spending

Beside household consumption and exports, government spending is also linked with job creation. Government spending is one of expansionary policies that change firms and consumers' behaviours with regard to production and consumption (Dornbusch et al., 2014). To increase job creation, government can employ different strategies through fiscal policy depending on current economic position (Mayer, 2014). A study done on OECD countries, on how government decisions affect employment, illustrated that an increase in government spending led to economic growth which thereafter increased the level of employment (Holden and Sparrmany, 2014). Nonetheless, government spending on job creation is more effective during the sluggish economic conditions than when the economy is booming (Beard et al., 2011). The positive relationship between government spending and job growth was also supported by Ramey's (2012) study on the effects of government spending and jobs growth; which found that the more government spends towards economic growth, the more jobs are created. Government spending on infrastructure and subsidies to domestic firms tend to improve investments and create more and durable jobs (Girma et al., 2007; Beard et al., 2011; Boushey and Ettliger, 2011). This explains the link between job creation and growth in investment.

Investment is used to create jobs and in return jobs create investment (Heintz, 2000). The theory of interdependence between investment and employment is explained by tight cause-effect relationship between investment and employment; where the change in one side directly affects the other. This was supported by the study of Psaltopoulos et al. (2011) which found that in the EU rural regions more jobs were created throughout growth in private investment. The study conducted by Iacovoiu (2012) in Romania also found that the result of fluctuation in investment in Romania between year 2004 and 2012 was oscillation in employment rate. Thus, one of the best ways to create more and durable jobs, is to stimulate firm's investment including new or starting-up firms (Bogliacino and Vivarelli, 2010; Adelino et al., 2014). Growth in firms' investments lead to increase provision of goods and services in business or service markets and this would increase the demand for more labour. However, this is only possible if firms' investments favour labour employment rather

than technology production oriented, as in some instances technology destroys jobs (Rotman, 2013); implying that increased investment may sometimes lead to decline in job creation.

3 Methodology

3.1 Data and description of the variables

The study is focusing on the relationship between job creation (employment) and aggregate expenditure in South African context. The study is based on 76 quarterly observations from the first quarter of 1995 to fourth quarter of 2014. The sample period starts from 1995 in order to exclude the effect of economic embargo against apartheid regime before 1994, especially on export's data. Variables selected are employment rate (which represent job creation) (EMP) and four components of real aggregate expenditure namely household consumption (CONS), total government expenditure (GOVS), gross fixed capital investments (INVES), and total exports (EXPO). Data of all used variables were accessed from the South African Reserve Bank (SARB).

3.2 Model specification

In the context of this study, the relationship between employment and the various components of total aggregate expenditure can be expressed by following model:

$$EMP_t = f(\text{CONS}, \text{GOVS}, \text{INVES}, \text{EXPO}) \quad (1)$$

Where: EMP is the employment rate, CONS is household consumption, GOVS is the government spending, INVES is the gross domestic investment and EXPO is the total export.

Considering the model over time, there is a possibility that the dependent variable can be related to its own past values (lags) and to the values of independent variables. The multivariate relationships between employment and aggregate expenditure variables have been determined through a Vector autoregressive (VAR) model. Chan (2010) and Maddala (2001) stated that Vector Autoregressive should be the first step for such multivariate analysis so that other analyses such as co-integration, vector error correction, causality test, impulse response can follow. The VAR model from the function described in Equation 1 is as follows:

$$EMP_t = \alpha_1 + \sum_{j=1}^k \beta_{1j} EMP_{t-j} + \sum_{j=1}^k \lambda_{1j} CONS_{t-j} + \sum_{j=1}^k \gamma_{1j} GOVS_{t-j} + \sum_{j=1}^k \delta_{1j} INVES_{t-j} + \sum_{j=1}^k \theta_{1j} EXPO_{t-j} + u_{1t} \quad (2)$$

$$CONS_t = \alpha_2 + \sum_{j=1}^k \beta_{2j} EMP_{t-j} + \sum_{j=1}^k \lambda_{2j} CONS_{t-j} + \sum_{j=1}^k \gamma_{2j} GOVS_{t-j} + \sum_{j=1}^k \delta_{2j} INVES_{t-j} + \sum_{j=1}^k \theta_{2j} EXPO_{t-j} + u_{2t} \quad (3)$$

$$GOVS_t = \alpha_3 + \sum_{j=1}^k \beta_{3j} EMP_{t-j} + \sum_{j=1}^k \lambda_{3j} CONS_{t-j} + \sum_{j=1}^k \gamma_{3j} GOVS_{t-j} + \sum_{j=1}^k \delta_{3j} INVES_{t-j} + \sum_{j=1}^k \theta_{3j} EXPO_{t-j} + u_{3t}. \tag{4}$$

$$INVES_t = \alpha_4 + \sum_{j=1}^k \beta_{4j} EMP_{t-j} + \sum_{j=1}^k \lambda_{4j} CONS_{t-j} + \sum_{j=1}^k \gamma_{4j} GOVS_{t-j} + \sum_{j=1}^k \delta_{4j} INVES_{t-j} + \sum_{j=1}^k \theta_{4j} EXPO_{t-j} + u_{4t}. \tag{5}$$

$$EXPO_t = \alpha_5 + \sum_{j=1}^k \beta_{5j} EMP_{t-j} + \sum_{j=1}^k \lambda_{5j} CONS_{t-j} + \sum_{j=1}^k \gamma_{5j} GOVS_{t-j} + \sum_{j=1}^k \delta_{5j} INVES_{t-j} + \sum_{j=1}^k \theta_{5j} EXPO_{t-j} + u_{5t}. \tag{6}$$

Where: α_n is the constant; $\beta_n, \lambda_n, \gamma_n, \delta_n$ and θ_n are the coefficients; k is number of lags and u_{1t}, \dots, u_{5t} are the stochastic error terms (known as shocks in a VAR model). Before the estimation these above equations, the unit root test is done to check whether each variable are stationary or not. This test was conducted using the Augmented Dickey-Fuller test. If variables are stationary at the level, $I(0)$, we continues with VAR and if they are not stationary and have a unit root, $I(1)$, then the co-integration test

is conducted to establish whether the variables are integrated. This study used the multivariate co-integration test by Johansen (1988). If variables are not co-integrated, the Vector Autoregressive is estimated in first difference. However, if there is exists a co-integration among variables, then the VECM is estimated. For this study VECM's equations derived from VAR model, in equations 2 to 6, are as follows:

$$\Delta EMP_t = \alpha_1 + \sum_{j=1}^k \beta_{1j} \Delta EMP_{t-j} + \sum_{j=1}^k \lambda_{1j} \Delta CONS_{t-j} + \sum_{j=1}^k \gamma_{1j} \Delta GOVS_{t-j} + \sum_{j=1}^k \delta_{1j} \Delta INVES_{t-j} + \sum_{j=1}^k \theta_{1j} \Delta EXPO_{t-j} + \varphi_1 u_{1t-1} + e_{1t}. \tag{7}$$

$$\Delta CONS_t = \alpha_2 + \sum_{j=1}^k \beta_{2j} \Delta EMP_{t-j} + \sum_{j=1}^k \lambda_{2j} \Delta CONS_{t-j} + \sum_{j=1}^k \gamma_{2j} \Delta GOVS_{t-j} + \sum_{j=1}^k \delta_{2j} \Delta INVES_{t-j} + \sum_{j=1}^k \theta_{2j} \Delta EXPO_{t-j} + \varphi_2 u_{2t-1} + e_{2t}. \tag{8}$$

$$\Delta GOVS_t = \alpha_3 + \sum_{j=1}^k \beta_{3j} \Delta EMP_{t-j} + \sum_{j=1}^k \lambda_{3j} \Delta CONS_{t-j} + \sum_{j=1}^k \gamma_{3j} \Delta GOVS_{t-j} + \sum_{j=1}^k \delta_{3j} \Delta INVES_{t-j} + \sum_{j=1}^k \theta_{3j} \Delta EXPO_{t-j} + \varphi_3 u_{3t-1} + u_{3t}. \tag{9}$$

$$\Delta INVES_t = \alpha_4 + \sum_{j=1}^k \beta_{4j} \Delta EMP_{t-j} + \sum_{j=1}^k \lambda_{4j} \Delta CONS_{t-j} + \sum_{j=1}^k \gamma_{4j} \Delta GOVS_{t-j} + \sum_{j=1}^k \delta_{4j} \Delta INVES_{t-j} + \sum_{j=1}^k \theta_{4j} \Delta EXPO_{t-j} + \varphi_4 u_{4t-1} + e_{4t}. \tag{10}$$

$$\Delta EXPO_t = \alpha_5 + \sum_{j=1}^k \beta_{5j} \Delta EMP_{t-j} + \sum_{j=1}^k \lambda_{5j} \Delta CONS_{t-j} + \sum_{j=1}^k \gamma_{5j} \Delta GOVS_{t-j} + \sum_{j=1}^k \delta_{5j} \Delta INVES_{t-j} + \sum_{j=1}^k \theta_{5j} \Delta EXPO_{t-j} + \varphi_5 u_{5t-1} + e_{5t}. \tag{11}$$

Where: Δ is representing the first difference, $u_{1t-1}, \dots, u_{5t-1}$ are error correction terms; whilst $\varphi_1, \dots, \varphi_5$ are error correction coefficients to capture the adjustments of change in the variables to long-run equilibrium. The coefficients, $\beta_n, \lambda_n, \gamma_n, \delta_n$ and θ_n capture the short-run changes of the model. The selection of lags (k) number are selected based on Akaike Information Criterion (AIC) on Schwarz-Boyesian Information Criterion (SBIC) (Brooks, 2008). The interpretation of VCM results is preceded by some diagnostic tests such as normality, parameter stability, autocorrelation, and heteroscedasticity tests to ensure the reliability of obtained results (Maddala, 2001). Lastly, impulse response analysis and variance decompositions are employed to determine how employment rate (job creation) responds to changes of aggregate expenditure over time.

4 Empirical results and discussion

4.1 Correlation analysis and unit root tests

Table 1 presents the outcome of the Pearson correlation coefficients and the all significant at the 5% level of significance. There is strong positive correlation between dependent (EMP) and independent variables (CONS, GOVS, INVES, and EXPO) and independent variables are positively correlated to one another. This confirm the theoretical explanation of the interdependence among the components of the aggregate expenditure.

Results of Augmented Dickey Fuller unit root test with and without trend are summarized in Table 2, at the level, the p-values are greater 0.5; implying there is a presence of unit root at level without and with a trend. Thus, all variables are non-stationary at the level. However, at the first difference without trend all variables become stationary at the 1 percent level of significance (p-value < 0.1). Thus, all variable are $I(1)$; suggesting the co-integration test should be conducted to test if they integrate in the long-run. Having the stationary variables, we need to determine the number of lags to be used in this study.

Table 1. Pairwise correlations

	<i>EMP</i>	<i>CONS</i>	<i>GOVS</i>	<i>INVES</i>	<i>XPO</i>
<i>EMP</i>	1.000				
<i>CONS</i>	0.937369	1.0000			
<i>GOVS</i>	0.94327	0.973404	1.0000		
<i>INVES</i>	0.96279	0.97225	0.973873	1.0000	
<i>EXPO</i>	0.878207	0.93172	0.863138	0.907069	1.0000

Note: All coefficient are statistically significant at the 5% level of significance

Table 2. ADF unit root test results

	<i>Level</i>		<i>1st Difference</i>			
	<i>Without trends</i>		<i>With trend</i>		<i>Without trend</i>	
	t-statistics	P-value	t-statistics	P-value	t-statistics	P-value
<i>EMP</i>	-2.898623	0.9177	-3.467703	0.5018	-2.899115	0.0000**
<i>CONS</i>	-2.901779	0.9648	-3.471693	0.1537	-2.901779	0.0038**
<i>GOVS</i>	-2.899115	0.9965	-3.468459	0.6257	-2.899115	0.0001**
<i>INVES</i>	-2.900137	0.9405	-3.470851	0.2658	-2.899619	0.0000**
<i>EXPO</i>	-2.900670	0.5537	-3.470851	0.0925	-2.900670	0.0012**

Note: ** denotes the rejection of the null hypothesis of unit root at the 1% significance level of significance

4.2 Lag-length selection criteria

Since all the variables are I(1), the next step is to determine the number of lags that will be used for Johansen co-integration test and the vector error

correction model. The results from the information criteria for lag lengths, summarized in Table 3, show that all criteria reach the same conclusion of 5 lags as the optimum number of lags. Thus, 5 lags were used.

Table 3. Lag order selection results

<i>Lag</i>	<i>LogL</i>	<i>LR</i>	<i>FPE</i>	<i>AIC</i>	<i>SC</i>	<i>HQ</i>
1	-3071.358	NA	1.56e+31	86.00993	86.80044	86.32464
2	-3015.769	95.73657	6.70e+30	85.16024	86.74126	85.78965
3	-2987.119	45.36200	6.19e+30	85.05886	87.43039	86.00297
4	-2929.881	82.67764	2.64e+30	84.16335	87.32538	85.42216
5	-2850.356	103.8238*	6.27e+29*	82.64878*	86.60132*	84.22230*
6	-2834.311	18.71885	9.05e+29	82.89753	87.64059	84.78576
7	-2819.074	15.66068	1.42e+30	83.16872	88.70228	85.37164
8	-2793.378	22.84087	1.81e+30	83.14938	89.47346	85.66702

Note: * indicates lag order selected by the criteria

4.3 Long run relationship

Results of Johansen co-integration, in Table 4, show that the null hypothesis that there is no co-integrating equation ($r=0$) is rejected as the p-values for Trace statistic and Max-Eigenvalue are lower than 5%. From the hypothesis that there is at least one co-integrating equation ($r \leq 1$), Trace and Max-Eigen statistics are

greater than 5%, henceforth, the null hypothesis is accepted. Thus, there one co-integration equation; implying that there is a long-run relationship between job creation and the components of aggregate expenditure. This long-run relationship is explained by Equation 12.

Table 4. Johansen co-integration results

<i>H0</i>	<i>H1</i>	<i>Trace</i>			<i>Maximum Eigenvalue</i>		
		<i>Trace statistic</i>	<i>t-critical value</i>	<i>P-value</i>	<i>Max-Eigen Statistic</i>	<i>t-critical value</i>	<i>P-value</i>
$r=0$	$r>0$	76.51401	69.81889	0.0132*	35.83948	33.87687	0.0288*
$r \leq 1$	$r>1$	40.67453	47.85613	0.1993	19.044	27.58434	0.4111
$r \leq 2$	$r>2$	21.63053	29.79707	0.3195	11.28173	21.13162	0.6192
$r \leq 3$	$r>3$	10.3488	15.49471	0.2548	9.456023	14.2646	0.2502
$r < 4$	$r > 4$	0.892778	3.841466	0.3447	0.892778	3.841466	0.3447

* denotes the rejection of the null hypothesis of unit root at 5% significance levels and the rank of co-integration is denoted by “r”.

$$EMP_{t-1} = 38.94303 - 0.000604CONS_{t-1} + 0.001019GOVS_{t-1} + 0.000916INVES_{t-1} + 0.000223EXPO_{t-1} \quad (12)$$

[T-start] [3.73855] [-2.77795] [-8.16325] [-1.45981]

From the Equation 12, we have all expected signs for independent variable coefficients except the one for consumption. In long run there is a negative relationship between employment and consumption. The increase in household's consumption leads to a decline in employment. This negative relationship between employment and household consumption is supported by the study by Autor et al. (2013) which found that if households consume imported goods and services, job creation is negatively affected. This negative effect of household consumption on job creation in South Africa might suggested South African household consumption may linked with high level of imported products. This may be explained absence of a significant the long-run relationship between exports and job creation as shown by the results in Equation 12. This finding is not surprising considering that South Africa is more open to global trade and may not be competitive or stand against the cheap products from other BRICS countries such as China and Russia Recently, South Africa has increased the consumption of Chinese products which caused a decline in consumption of local (Yang, 2014).

Notwithstanding, investment and government spending have significant and positive long-run effect on employment; implying that increase in both government and investment expenditure can create jobs. These finding are consistent with previous studies (Barry, 1986; Girma et al. 2008; Kitao et al., 2010; Boushey and Ettliger, 2011; Psaltopoulos et al., 2011; Ramey, 2012; Adelino et al., 2014; Holden and Sparrmany, 2014) which found a positive relationship between government expenditure, investment and job creation. Thus, in the South African context, the increase in government expenditure and investment can lead to job creation, in the long-run. These findings are the same as the outcome of the study of Faulkner et al. (2013) on South African job creation which revealed that the strategy to raise employment rate in South Africa should be boosting saving and investment.

4.4 Short-run relationships

Having our variables co-integrated, then the VECM was estimated next and only error corrector rems in each are in Tale 5. Considering that the error correction term has to be negative, the employment equation is the only equation that explain the adjustment to the long-run equilibrium. However, this ECT is not statically significant; meaning that short-run changes are not significant in restoring the long-run equilibrium. This may suggest that there is no short-run relationship between job creation and the four components of the aggregate expenditure as

shown by non-significant coefficients of most the lags³⁴ in VECM.

The absence of the short-run relationship is confirmed by the results of Granger causality test, in Table 6, which show that there is no causal relationship between the variables. This means that short-run changes in components of aggregate expenditure (consumption, government expenditure, investment and exports) do not cause changes in job creation. The results of Granger causality test are supported by the variance decomposition results, in Table 7, which showed that shocks in employment rate are mostly its own shock. At the fourth quarter (period 04), the employment rate explains 90% of its own shocks; while other variables explain about 10% of changes in employment rate. At the 10th period (quarter) the employment still explain about 64% percent of its own shock while other variables jointly explain about 36%. At period 10, the movement spending seem to be the highest (15.44%) in explaining the variance in employment rate; while export is only explain about 6.17% of variance in employment rate.

4.5 Impulse responses

The impulse response test has been conducted to describe the reaction of variables to the shock caused by exogenous changes. The results, in Figure 1, show that the higher changes in employment rate are due to its own shocks. The responsiveness of employment to consumption's shock is not very significant; it rises from the first quarter to the fifth quarter, then it becomes constant. However, the responsiveness of employment to the change in government spending is very significant, it rises from first to the fourth quarter, the slow down and restarts from the sixth quarter upwards. This result confirms the outcome of variance decomposition. The response of employment to investment shows that from fifth quarter employment declines due to the change in investment. Finally, when exports change there is a fluctuation in employment up to seventh period, then it became constant, meaning that the is no long-run relationship between employment and exports.

In short-run, all coefficients of the independent variables are not significant. Meaning that in short-term changes in CONS, GOVS, INVES, and EXPO have no explanatory power on current fluctuation of EMP. This can make sense because it not easy to create jobs in short term.

³⁴ Results of coefficient for lags in VECM are not reported in the paper but can be accessed from the authors

Table 5. Results of error correction terms

<i>Error Correction:</i>	<i>D(EMP)</i>	<i>D(CONS)</i>	<i>D(GOVS)</i>	<i>D(INVES)</i>	<i>D(EXPO)</i>
ECT	-0.172027	213.3084	315.5114	273.2690	241.6270
S.E	(0.17566)	(194.365)	(118.890)	(108.403)	(386.466)
T-Value	[-0.97935]	[1.09746]	[2.65381]	[2.52087]	[0.62522]

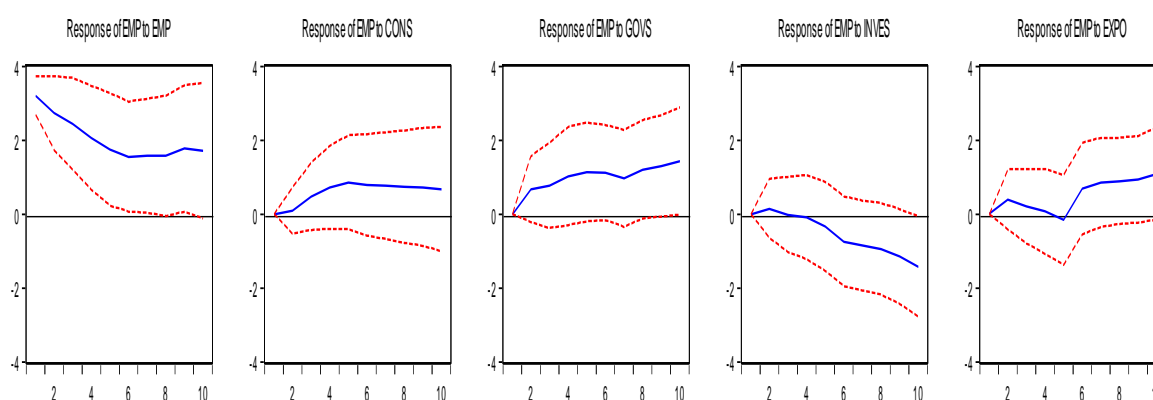
Table 6. Pairwise Granger Causality Tests

<i>Null Hypothesis</i>	<i>F-Statistic</i>	<i>Prob.</i>
D(CONS) does not Granger Cause D(EMP)	0.83201	0.5318
D(EMP) does not Granger Cause D(CONS)	0.28568	0.9193
D(GOVS) does not Granger Cause D(EMP)	0.48722	0.7845
D(EMP) does not Granger Cause D(GOVS)	0.30423	0.9086
D(INVES) does not Granger Cause D(EMP)	0.30901	0.9058
D(EMP) does not Granger Cause D(INVES)	0.82617	0.5358
D(EXPO) does not Granger Cause D(EMP)	0.04283	0.9989
D(EMP) does not Granger Cause D(EXPO)	0.36119	0.8731

Table 7. Variance decomposition of employment

<i>Period</i>	<i>S.E.</i>	<i>EMP</i>	<i>CONS</i>	<i>GOVS</i>	<i>INVES</i>	<i>EXPO</i>
1	3.201578	100.0000	0.000000	0.000000	0.000000	0.000000
2	4.281441	96.58844	0.046845	2.420523	0.120300	0.823889
3	5.012783	94.08092	0.894692	4.158618	0.089200	0.776566
4	5.562655	90.08660	2.415245	6.752936	0.100056	0.645163
5	6.009442	85.59783	4.076307	9.299373	0.398321	0.628165
6	6.433229	80.46665	5.047628	11.11577	1.691516	1.678441
7	6.842095	76.41996	5.697545	11.79052	3.058183	3.033800
8	7.277966	72.19705	6.068627	13.13390	4.419038	4.181383
9	7.777862	68.38910	6.176870	14.26534	6.078166	5.090522
10	8.316671	64.08020	6.047956	15.44051	8.259448	6.171887

Figure 1. Response of employment to innovation in other variables



4.6 Residual diagnostic tests

Diagnostic test on VECM results include Lagrange Multiplier to detect the presence of auto-correlation, the Jarque-Bera to test the normality of series and the

White Heteroscedasticity test to verify whether variables are homoscedastic. Results of these tests, summarized in Table 8, show that the VECM does not violate econometric assumptions.

Table 8. Results of diagnostic tests

<i>Test</i>	<i>H₀</i>	<i>P-value</i>	<i>Decision</i>
Jarque-Bera	Residuals are normally distributed	0.52251	Since P-value is greater than 5%, we fail to reject H ₀ . Henceforth, residuals are normally distributed.
L M Test	No Serial correlation	0.9899	Since P-value is greater than 5%, we fail to reject H ₀ . Henceforth, there is no serial correlation in the model.
White (CT)	No Heteroscedasticity	0.7789	Since P-value is greater than 5%, we fail to reject H ₀ . Henceforth, there is no heteroscedasticity in the model.

6 Concussion and recommendations

Job creation is one of the factors that sustain economic growth and economic development for the lack or shortage in jobs results in social and economic problems. The aim of this study was to establish the effect of aggregate expenditure on jobs creation in the South Africa. Based on Keynesian aggregate expenditure model, the co-integration test, vector error correction approach, and causality test were employed to determine how employment (job creation) responds to the change in aggregate expenditure components. The findings from Johansen co-integration attested the long-run relationship between government and investment expenditures. Nevertheless, consumption and exports do not improve jobs creation in South Africa. In the short-run, there are no significant interaction between components of aggregate expenditure and job creation. The overall conclusion is that the aggregate expenditure, in long-run, plays an important role in creating jobs in South Africa and there is no short-term macroeconomic solution to job creation. Considering that government and investment expenditures determinant of job creation in South Africa, policy makers should create a conducive environment for investment and channel government spending to durable goods such as infrastructure. South African government may also consider boosting consumption of local product by finding ways of helping domestic firms to compete with cheaper imported products.

References

- Adelino, M., Ma, S. and Robinson, D.T. (2014), "Firm Age, Investment Opportunities, and Job Creation". Duke University and NBER.
- Aswicahyono, H., Brooks, D.H. and Manning, C. (2011), "Exports and Employment in Indonesia: The Decline in Labour-Intensive Manufacturing and the Rise of Services", Economics Working Paper Series No. 279.
- Autor, D.H., Dorn, D. and Hanson, G.H. (2013), "The China syndrome: Local Labour Market Effects of Import Competition in the United States", American Economic Review, Vol. 103 No.6, pp.2121–2168.
- Barry, F.G. (1986) "Profitability, Investment and Employment: Survey of Recent Developments in Medium-Term Growth Theory". The Economic and Social Review, Vol. 17 No. 3, pp.159-173.
- Beard, T.R., Ford, G.S., Kim, H. and Spiwak, L. J. (2011), "Can government spending get America working again? An empirical investigation", Phoenix Center Policy Bulletin, No31 pp. 1-15.
- Bentolila, S. and Ichino, A. (2000), "Unemployment and consumption: Are job losses less painful near the Mediterranean?" *Working Paper*, No. 0010.
- Berger, B. and Martin, R. F. (2011), "The Growth of Chinese Exports: An Examination of the Detailed Trade Data". *International Finance Discussion Papers*, No.1033.
- Bernard, B. A. and Jensen, B. J. (1999), "Exceptional exporter performance: cause, effect, or both"? *Journal of International Economics*, Vol. 47 No. 1–25.
- Bobeica, E., Esteves, P.S., Rua, A. and Staehr, K. (2015), "Exports and domestic demand pressure: a dynamic panel data model for the euro area countries", *Working Paper Series*, No. 1777.
- Bogliacino, F. and Vivarelli, M. (2010), "The job creation effect of R&D expenditures" Working Paper, No. 04.
- Boushey, H. and Ettliger, M. (2011), "Government Spending Can Create Jobs and It Has". Center for American Progress.
- Chan, N.H. (2010), *Time Series: Applications to Finance with R and S-Plus*. New Jersey: John Wiley & Sons
- Cray, A., Nguyen, T., Pranka, C., Schildt, C., Scheu, J. and Whitcomb, R. (2011). job creation: A review of policies and strategies. *Working paper series* (105-11).
- Davis, S. J., Haltiwange, J. and Schuh, S. (1996), "Small Business and Job Creation: Dissecting the Myth and Reassessing the Facts". *Small Business Economics*, Vol. 8 No. 4, pp. 297-315.
- Dizaji, M. and Badri, A.K. (2014), "The Effect of Exports on Employment in Iran's Economy". Merit Research Journal of Art, Social Science and Humanities, Vol.2 No.6, pp. 081-088.
- Dornbusch, R., Fischer, S. and Startz, R. (2014), *Macroeconomics*. New York, McGraw-Hill Education.
- Emilia, H. (2006). "The influence of final consumption on Employment in Romania". *Annals of Faculty of Economics*, Vol. 2 No.1, pp. 870-875.
- Faulkner, D., Loewald C. and Makrelov, K. (2013), "Achieving higher growth and employment: Policy options for South Africa". *ERSA Working Paper*.
- Girma, S., Görg, H., Strobl, E. and Walsh, F. (2007), "Creating Jobs through public subsidies: An empirical analysis". *IZA Discussion Paper*, No.3168.

20. Gurgul, H. and Lach, T. (2011), "The interdependence between energy consumption and economic growth in the Polish economy in the last decade". *Ekonomia Menedżerska* No.9, 25-48.
21. Heintz, J. (2000), "Distribution, investment, and employment in South Africa", Department of Economics, University of Massachusetts.
22. Holden, S. and Sparrmany, V. (2014), "Do government purchases affect unemployment"?
23. Iacovo, V.B. (2012), "Impact of Capital Investments on Unemployment in the Context of Economic Crisis: The Case of Romania". *Economic Insights – Trends and Challenges*, Vol. 1 No. 64, pp. 36 -47.
24. International Labour Organization, (2015), "World Employment and Social Outlook". Retrieved August 2015, from http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_337069.pdf.
25. Kitao, S., Şahin, A. and Song, J. (2010), "Subsidizing Job Creation in the Great Recession", Federal Reserve Bank of New York Staff Reports No. 451.
26. Kiyota, K. (2011), "Trade and Employment in Japan" *OECD Trade Policy Working Papers*, No127.
27. Kiyota, K. (2014), "Exports and Employment in China, Indonesia, Japan and Korea". *OECD Trade Policy Papers*, No166.
28. Lamo, A., Pérez, J. J. and Schuknecht, L. (2007), "The cyclicity of consumption, wages and employment of the public sector in the Euro area". *Working Paper Series*.
29. Lardy, R.N. (2006), "China: Toward a Consumption-Driven Growth Path". Institute of International Economics.
30. Loku, A. and Deda, G. (2013), "Unemployment in relation of growth population", *International Journal of Research in Social Sciences*, Vol. 2 No.2.
31. Maddala, G. (2001), Introduction to Econometrics, West Sussex, John Wiley & Sons, Ltd.
32. Maqbool, M.S., Sattar, T. M. A. and Bhalli, M. N. (2013), "Determinants of unemployment: Empirical Evidences from Pakistan" *Pakistan Economic and Social Review*, Vol. 51 No 2, 191-207.
33. Meyer, D.F. 2014. "Job Creation, a Mission Impossible? The South African Case". *Mediterranean Journal of Social Sciences*, Vol. 5 No. 16, pp. 65-77.
34. Michailat, P. and Saez, E. (2013), "A model of aggregate demand and unemployment", *Working Paper*, No. 18826.
35. Okun, A.M. (1962), "Potential GNP, its measurement and significance", Cowles Foundation, Yale University.
36. Psaltopoulos, D., Skuras, D. and Thomson, K. J. (2011), "Employment effects of private investment initiatives in rural areas of southern Europe: a regional SAM approach", *Agricultural Economic review*, Vol.12 No.1, pp. 50-61.
37. Ramey, V.A. (2012). "Government Spending and Private Activity", University of California, San Diego and NBER.
38. Rotman, D. (2013). "How Technology Is Destroying Jobs", *MIT Technology Review Magazine*.
39. Said, M. and Elshennawy, A. (2010) "The impact of trade liberalization on manufacturing employment and wages in Egypt 1990-2007", *MPRA Paper*, No. 46.
40. Schettkat, R. and Salvedra, W. (2004), "Demand patterns and employment growth consumption and services in France, Germany, the Netherlands, the United Kingdom and the United States", *Working Paper No. 13*.
41. Schussler, M. (2013), "Gehamer oparmoede kan boomerang". Sake24. 14 October 2013, Johannesburg.
42. Şeker, M. (2010), "Rigidities in employment protection and exporting", *Policy Research Working Paper*.
43. Statistics South Africa (StatsSA). (2014), Quarterly labour force survey, quarter 4 of 2014, Pretoria, Government printer.
44. Toossi, M. (2002), "Consumer spending: an engine for U.S. job growth", *Monthly Labour Review*.
45. Yang, Z. (2014), "The Impact of the Emergence of China's Economy on South Africa", Québec: Université de Laval. (Thesis - PhD).

DEMOGRAPHIC DIFFERENCES, OCCUPATIONAL STRESS AND ORGANISATIONAL COMMITMENT AMONG EMPLOYEES IN HIGHER EDUCATION INSTITUTION

Zhuwao S, Setati TS**

Abstract

The objectives of this study was to determine the levels of occupational stress and organizational commitment of employees and to determine the differences of occupational stress and organisational commitment based on demographic information in a higher education institution. The sample consisted of 141 academic staff. The Organisational Stress Screening Tool (ASSET), and Allen and Meyer's Organisational Commitment Tool (OCT) were used. The results showed that different occupational stressors contributed significantly to low organisational commitment. Occupational stress levels about job characteristics, work relationships, job overload and job control contributed to low levels of organisational commitment. The results also showed that there is a significant difference in occupational stress and organisational commitment levels based on the demographic differences of employees.

Keywords: Occupational Stress, Organisational Commitment, Employees, Higher Education Institutions

**University of Venda, Department of Human Resource Management and Labour Relations, Private Bag 5050, Thohoyandou, 0950*

Tel: 015 962 8258

Fax: 015 962 4749

1 Introduction

In all organisations around the world, employees are the most valuable asset (Carrel & Wayar, 2008). It is their responsibility to fulfil the organisational objectives and goals, interact with customers and perform their duties. As a result, most organisations have become conscious of the significance of employees within the organisation hence maintaining an occupational stress free environment (Teller, Ayeni & Popoza, 2007). This supports a study by Swanger (2005) who reported that a healthy work environment result in increased organisational commitment. However, due to globalisation, restructuring and technological changes, occupational stress has become an inevitable feature of occupational life for employees (Barkhuizen and Rothmann, 2008).

The continuous effects of globalisation and technological changes have seen most companies undergoing constant restructuring to compete in the global capitalists market (Chinnamai, 2005). The higher educational institutions (HEI) as a public entity have been identified as amongst the victims of globalisation hence forced to transform its structure and systems (Chinnamai, 2005). In South Africa, the restructuring of universities for the past two decades has led to significant changes in the nature of work and therefore increasing job demands on academic

staff (Oosthuizen & Berndt 2008). According to Reddy and Poornima (2012), other factors resulting in increased occupational stress levels include increased domestic and international competition. HEI through the department of higher Education seek to achieve the international standard of education and compete globally. The change in its systems and quality of programmes offered are evidence of the competition with other international university.

Reddy and Poornima, (2012) stated that competition stimulate increase demands for producing high quality products (programme) thereby calling for higher educational institutions to restructure its system to meet these needs (i.e. producing high quality graduates). Consequently, this has resulted in most academic staff perceiving high levels of occupational stress and reduced organisational commitment levels (Reddy & Poornima, 2012).

Regardless of the effects of occupational stress on organisational commitment, occupational stress immensely affects the organisation in terms of poor performance, increased absenteeism, lack of creativity, poor decision making, lack of confidence and low morale (Schaufeli, Maslach & Marek, 1983). Therefore, this study is aimed at investigating the levels of occupational stress and organisational commitment of employees in higher education institution. Also, to determine differences of

occupational stress and organisational commitment of employees based on demographic information. It is important for higher educational institutions to investigate and identify stressors experienced by employees at different levels in life.

2 Literature review

The literature review section consists of three parts as follows, occupational stress, organisational commitment and the relationship between the variables.

2.1 Occupational stress

According to Ahgar (2008), occupational stress is defined as the imbalance between individual capabilities and the demands of the work environment. A study by Blix, Cruise, Mitchell and Blix, (1994) on university staff within higher education institution reported a continuous increase on occupational stress levels of employees. The findings showed that 74.1% of university academic staff was ascetically stressed and 10.4% severely stressed. Therefore, occupational stress has become a common phenomenon which if not managed well can result in a variety of illnesses (Ismail, Yao, Yeo, Lai-Kuan, & Soon Yew, 2010). In addition, Hanrahan, Kinman and Wissing (2002) states that high levels of occupational stress undermine the quality, creativity, morale and productivity of employees. This clearly indicates that occupational stress is associated with low organisational commitment (Barkhuizen & Rothmann (2008). Sources of stress include work relationship (Geese & Moss, 2001), work life balance (Voydanoff & Donnelly, 1999), job overload (Faragher & Cooper, 2004), job security (McDonough, 2000), job control (McKnight, 1996), resources and communication (industrial society, 2001), pay and benefits (Tepper, 2008) and job characteristics (Wevers & Steyn, 2002). Employees experiencing high levels of occupational stress are less committed to their organisation (Siu, 2004).

2.1.1 Work relationships

It is important for employees to maintain a good working relationship by spending the whole day interacting with his or her colleagues. According to Industrial society (2001), a working environment that is characterised by good relationships assists individuals to cope with stress. Geese and Moss (2001) suggests that relationships are important for both individual and organisational success. Relationships can either be amongst colleagues, superiors, and subordinates and can either be positive thus helping individuals to cope with stress or negative thus creating stress.

A working environment characterised with poor working relationships and interpersonal conflict has seen employees being diagnosed with psychiatric illness, mental instability and stress (Johnson & Cooper, 2003). A relationship at work could be potentially stressful due to poor communication and mistrust which could result in poor psychological health (Rothmann and Essenko, 2007). Research findings have shown that one of the main causes of occupational stress in South African higher educational institutions is poor working relationships (Coetzee & *et al.*, 2005; Tytherleigh, Webb, Cooper & Ricketts, 2005).

2.1.2 Work-life balance

According to Voydanoff and Donnelly (1999), family and work responsibilities are one of the complex research problems which researchers are trying to eliminate through balancing their everyday work-life situation. Duxury and Higgins (2004) describes work life balance as the increasing demands of many work and non-work life roles that are discordant in some respect so that participating in one role is made difficult by participating in the other role.

2.1.3 Overload

Faragher and Cooper (2004) recognised the relationship between work overload and stress. The imbalance between the physical demands of the working environment and individual effort, psychological and emotional demand caused by role ambiguity and pace of work contribute to the relationship between work stress and work overload (Demerouti, Bakker, Nchreiner & Schaufeli, 2000). According to Bateman (2001), stressful overload is a consequence of many task responsibility and insufficient resources such that an individual is unable to complete his/her work.

Spurgeon, Harrington and Cooper (2000) posit that inconsistent work schedules and long working hours contribute to the ambivalent relationship. In addition, the study by the Industrial Society (2001) indicated that employees who were given unrealistic deadlines and continuous time pressures were found to be victims of occupational stress. The study by Coetzee *et al.*, (2005) indicates that one of the major causes of occupational stress for South African higher educational institution was work overload.

2.1.4 Job security

The undergoing restructuring and technological advancement in organisations is widely recognised as two major issues affecting individuals' job security (Vakola & Nikolau, 2005). Individuals perceive changes as highly stressful especially to those without the qualifications, experience, and skills. McDonough (2000) postulates that the fear of one losing his or her

job is one of the main potential sources of the stress. According to Tytherleigh *et al.* (2005), research indicates that job insecurity was the major cause of occupational stress in the UK.

2.1.5 Control

According to Coetzee *et al.* (2005) control is the amount of authority an individual has in making initiatives regarding the organisation of task and how to perform them. Individuals who are allowed to make initiatives or decisions regarding their work perceive high control on their work and they are less likely to suffer from stress than those who lack of control. Mc Knight (1996) claims that individuals who are not given the chance to exercise control in the workplace end up experiencing a negative psychological state, especially when they are in conflict between their career aspirations and occupational achievements. This lack of control is one of the main causes of occupational stress in South African higher educational institutions (Coetzee *et al.*, 2005, Rothmann *et al.* 2007) and the UK higher education institutions (Tytherleigh *et al.*, 2005).

2.1.6 Resources and communication

According to Barker, Demerouti and Euwema (2005), job resources are those physical or psychological aspects that either have positive or negative impact on job demands and the associated physiological and psychological costs. Job resources are essential in achieving work goals and stimulating personal growth and development, and include adequate training, equipment and effective communication system in the organisation (Barker *et al.*, 2005).

Cartwright *et al.* (2002) suggest that constant and adequate training is needed for employees to perform their duties effectively. Cartwright *et al.* (2002) further indicate that the level of communication and resources determines the level of stress and performance of employees. Moreover, lower levels of communication and resources are associated with increased levels of occupational stress (Industrial Society, 2001). Coetzee *et al.*, (2005), add that resources and communication are major significant causes of occupational stress in South African higher educational institution and the UK (Tytherleigh *et al.*, 2005).

2.1.7 Pay and benefits

According to DHET (2012), the issue of wages and salaries in South Africa is quite a controversial one. Tepper (2008) posits that the levels of stress experienced by academics and support staff are determined by their pay and benefits. Furthermore, Tepper (2008) accentuates that there is a strong connection between the amount of stress and performance pay. In South Africa, research has shown that one of the major stressors on educators of both

basic and higher education was pay and benefits (Rothmann, 2005). This led to a continuous production of unskilled graduates from different universities in the country due to lack of motivation and poor work performance (DHET 2012).

2.1.8 Job aspects

According to Van Zyl and Buitendach (2008), job context and job content are very crucial to the performance of employees in a working environment. It is important for job designers or supervisors to identify significant stressors in the education job that may lead to job dissatisfaction and low organisational commitment. There are a number of extrinsic stressors found in the education profession which include time pressures, role ambiguity, role conflict, role overload, lack of decisiveness, supervision, incompatibility of an individual and the environment, straining relations between colleagues, supervisors and the senior management, retrenchments and discipline (Wevers & Steyn, 2002). Intrinsic factors found amongst educators include sense of achievement, recognition and praise, autonomy, salaries, promotion, job security, working hours and lack of community commitment (Wevers *et al.*, 2002). Kraak (2004) stated that job aspects are one of the most significant causes of occupational stress for higher education staff in South Africa.

3 Organisational commitment

Organisational commitment is categorised into three types which includes a strong acceptance of the organisation's values and goals, a willingness to exert considerable effort on behalf of the organisation and a strong desire to maintain membership in the organisation (Paoline & Lambert, 2008). Therefore, it is determined by various individual and organisational factors such as personal characteristics, work experience and role characteristics (Paoline & Lambert, 2008). Employee organisational commitment can be measured during employment, especially in organisation that are dedicated in accomplishing the targeted organisational objectives (Taiwo, 2010). Hence a positive relationship develops between organisational commitment and attitudes to change (Paoline & Lambert 2010). This means that organisational commitment act as moderating effect of physical and psychological outcomes of stress and attitude towards change.

Lau and Woodman (2005) argued that moderating effects of organisational commitment protects employees from physical and psychological outcomes of stress and those possessing maladaptive behaviour. For that reason, the above findings show that organisational commitment may influence occupational stressors and attitudes towards organisational change (Paoline & Lambert, 2010). To give a clear description of organisational commitment,

the Allen and Meyer's three component model (affective, continuance, normative) was used.

3.1 Affective commitment

According to Allen and Meyer (1990), affective commitment is whereby an individual identifies with, involved in and emotionally attached to the organisation. In addition to the above statement, Rashid *et al.* (2003) claims that an affective commitment is the emotional attachment to the goals and principles of the organisation, as well as to the employee's role in relation to those goals and principles. As such, employees with a strong affective commitment remain in the organisation because they want to. Therefore, Johari, Rashid, Sambasivan (2003) defines organisational commitment as the emotional attachment of an employee to their organisation.

3.2 Continuance commitment

According to Benligiray and Sonmez (2012), continuance commitment involves an individual making his/her decisions based on opportunity costs thus choosing the best alternative for a situation. In this case, employees remain committed as they recognise the costs associated with leaving the organisation. Strong continuance commitment is either because of lack of options or because of high personal sacrifice associated with leaving the organisation. An employee possessing this form of commitment will continue with the organisation because they feel leaving the organisation would cost them dearly (Benligiray *et al.*, 2012).

3.3 Normative commitment

This is the commitment whereby an individual feels obliged to stay in an organisation (Meyer & Allan, 1991). In this case, an employee who's having a strong normative commitment will stay in the organisation as long as they still feel so. Employees with a strong normative commitment tend to be adaptive and flexible to the changes occurring in the organisation (Benligiray *et al.*, 2012). An individual's experience towards his or her former or current organisation affects this form of organisational commitment (Rashid *et al.*, 2003). This is because of societal socialisation and organisational socialisation which shapes up the behaviour and perception of an individual towards the organisation. Therefore, societal principles can put pressure on an individual before they are socialised through the organisation (Benligiray *et al.*, 2012).

4 Relationship between occupational stress and organisational commitment

Occupational stress and organisational commitment have become common and mutual subjects in organisational sciences and many researchers are keen to investigate the relationship between the two

variables. According to Viljoen and Rothmann (2009) occupational stress is associated with low organisational commitment. In a study by Greenhalgh and Rosenblatt (1984) it was revealed that stress about job insecurity can lead to reduced organisational commitment levels and therefore leading to high turnover. Furthermore, Rothmann (2005) showed that employees who perceived job aspects, work relationship and job control as a huge source of stress experienced low organisational commitment.

Educators in both high educational institutions and secondary schools were found experiencing more stress as a result of resources, workload and job characteristics, and therefore showed less commitment to the organisation (Jackson & Rothmann, 2006). Bakker, Demerouti, De Boer, and Schaufeli (as cited in Viljoen *et al.*, 2008) stated that insufficient resources and overload precludes goal accomplishment, which probably result in failure and frustration. Therefore, employees may have a negative attitude towards their job which possibly can be an outcome of organisational commitment.

The purpose of this study is to investigating the level of occupational stress and organisational commitment of employees and their differences based on demographic information. The study will examine the empirical analysis of the variables in higher education institution.

5 Research design

5.1 Research approach

This study used a cross-sectional survey targeting all academic staff members of the higher education institution.

5.2 Research method

5.2.1 Participants

The study population consisted of academic staff members ($N=800$) of a higher education institution in South Africa. A total of 298 questionnaires were distributed in the campus and a total of 141 questionnaires were completed and returned. The characteristics of the participants are shown in table1.

Table 1, describes the biographical variables of the participants. The table shows that a large number of participants are males (59%). A large number of participants are more than 50 years old (36%) and followed by 41 to 50 age bracket (24%). At the time when the research was conducted, a large number of participants (43%) had been working for the HEI for more than eight years and (26%) worked for less than five years. Furthermore, the table shows that a large number of participants (80%) had honour/Master's Degree and followed by participants with doctoral degree (20%). Lastly, participants speaking foreign language dominated this research (36%), followed by Tshivenda (21%), IsiZulu (15%), Sepedi (16%) and the least being Xitsonga (12%).

Table 1. Biographical variables of the participants

<i>Dimension</i>	<i>Category</i>	<i>Frequency</i>	<i>Percentage %</i>
Gender	Male	83	59
	Female	57	41
Age	Less than 30 years	22	16
	31-40 years	33	24
	41-50 years	34	24
	more than 50 years	51	36
Work experience	1-4years	36	26
	5-8years	43	31
	more than 8years	61	43
Qualification	Honours /Master's Degree	76	80
	Doctoral	57	20
Language	Tshivenda	30	21
	IsiZulu	21	15
	Sepedi	23	16
	Xitsonga	17	12
	Other	49	36

5.3 Measuring instrument

Biographical information was developed and attached to the questionnaire. The data was obtained with the use of an Organisational Stress Screening Tool (ASSET) and an Organisational Commitment Questionnaire (OCQ).

An Organisational Stress Screening Tool (ASSET) is a 37-item instrument used to measure the individual's perception towards his or her job and are scored on a six-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The reliability of the scale is based on the Guttman split-half coefficient (Cartwright & Cooper, 2002). A reliability coefficient of the scales of 0.64 to 0.94 which shows good reliability was considered satisfactory within a population of 613 in a study of occupational stress of employees in an insurance company (Coetzee & Rothmann, 2006).

An Organisational Commitment Questionnaire (OCQ) was also used to assess the organisational commitment of the employees. This a 21-item instrument used to measure the individual attitude towards the organisation (i.e. affective, continuance and normative commitment and are scored on a five point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The reliability of this scale is indicated by Cronbach alpha coefficient for the total score which were found to be above 0, 70 (Allen & Meyer, 1990; Ramakau, 2006).

The data was analysed with the aid of IBM-SPSS programme (IBM-SPSS, 2013). The programme carried out statistical analysis regarding descriptive statistics and standard multiple regression analysis. The one-way analysis of variance was used to determine the levels of occupational stress and organisational commitment of employees based on biographical information.

6 Results

Table 2 shows that scores of the measuring instruments were normally distributed with low skewness and kurtosis except for the scores of Pay and Benefits. The Cronbach alpha coefficients, varying from 0.62 – 0.89, compare reasonably well with the guideline of 0.70 (0.55 in basic research), indicating that a large portion of the variance is explained by the dimensions (internal consistency of the dimensions) (Nunnally & Bernstein, 1994). The interim correlations of all dimensions are also acceptable compared to the standard one of $0.15 \leq r \leq 0.50$ (Clark 1995).

The table shows that the sten scores of Job characteristics, job overload, and job control and work relationship were higher than the mean of 5.5 while work life balance, job insecurity, and pay were lower than the mean. Affective commitment and continuance commitment were also lower than the mean while normative commitment was to some extent higher than the mean.

6.1 Multiple regression analyses

To determine which occupational stressors predict individual commitment towards the organisation (affective, normative and continuance commitment), multiple regression analyses using the enter method were performed. The multiple regression analyses enabled to assess the contribution of occupational stressors to both affective, normative and continuance commitment. The results are reported in table 3 which shows seven dimensions of occupational stress (i.e. work life balance, resources, work relationships, overload, job security, job characteristics and job control) and organisational commitment (i.e. affective commitment, normative commitment and continuance commitment). The table indicates that affective, normative and continuance commitment were

statistically significant (all medium effects) which are work relationship, overload, job characteristics and job control. Continuance commitment and normative

commitment were strongly significant showing a statistically significant value of 0.67 and 0.70 on the table, which is close to the guideline (1.00)

Table 2. Descriptive statistics, Alpha Coefficients and Inter-item Correlations of the Scales

<i>Dimension</i>	<i>Sten</i>	<i>Mean</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>α</i>	<i>r(mean)</i>
Work life balance	3	13.98	6.39	0.72	-0.40	0.68	0.30
Resources and Communication	5	9.65	3.90	0.68	0.23	0.76	0.42
Work Relationships	6	13.98	4.64	0.69	0.45	0.79	0.36
Job Overload	6	12.13	5.00	0.58	-0.29	0.62	0.29
Job Insecurity	4	10.91	3.80	0.70	0.24	0.78	0.47
Job Characteristics	8	21.56	6.04	0.70	0.60	0.65	0.22
Pay and Benefits	1	3.65	1.69	-0.01	-1.33	-	-
Job control	7	10.60	4.97	0.57	0.31	0.75	0.44
Affective commitment	4	18.50	4.00	-1.33	1.86	0.83	0.51
Continuance commitment	4	19.80	3.33	0.40	0.34	0.89	0.39
Normative commitment	5	17.65	2.50	-1.37	2.40	0.70	0.43

Note. Pay and Benefits scale consists of only one item and therefore the alpha coefficient is not reported on this scale

Table 3. Standard Multiple Regression Analyses

<i>Variable</i>	<i>Unstandardised Coefficient</i>		<i>Standardised Coefficient</i>	<i>T</i>	<i>P</i>	<i>F</i>	<i>R²</i>	<i>R</i>
	<i>B</i>	<i>SE</i>	<i>Beta</i>					
<i>Affective commitment</i>						6.47*	0.16	0.39
(Constant)	29.40	0.84		37.21	0.00			
Work life balance	0.07	0.12	0.04	0.65	0.56			
Resources	-0.16	0.16	-0.18	-2.00	0.02*			
Job overload	0.18	0.09	0.16	2.40	0.04*			
Job security	0.02s	0.06	0.04	0.48	0.54			
Job control	-0.25	0.07	-0.24	-3.00	0.73			
Work Relationship	-0.02	0.06	-0.05	-0.34	0.73			
<i>Continuance Commitment</i>						16.6*	0.24	0.48
(Constant)	29.40	0.82		36.75	0.00			
Work life Balance	0.09	0.12	0.04	0.65	0.56			
Job Resources	-0.14	0.13	-0.17	-2.00	0.02*			
Job Overload	0.12	0.08	0.16	2.40	0.40			
Job Security	0.04	0.06	0.08	0.48	0.54			
Job Control	-0.25	0.05	-0.29	-3.00	0.00*			
Work Relationship	-0.02	0.06	-0.04	-0.34	0.52			
<i>Normative Commitment</i>						10.29*	0.04	0.32
(Constant)	18.40	0.85		34.05	0.00			
Work life Balance	0.03	0.15	0.03	0.63	0.44			
Job Resources	-0.13	0.09	-0.32	-3.02	0.02*			
Job Overload	0.21	0.17	0.18	2.30	0.04*			
Job Security	0.00	0.05	0.04	0.58	0.54			
Job Control	-0.09	0.02	-0.26	-4.00	0.66			
Work Relationship	-0.03	0.05	-0.04	-0.34	0.73			

Note: *p<0.05 statistically significant

One-way ANOVA was used to compare the demographic information on employee experience. As shown in Table 4, occupational stress and organisational commitment are compared with the level of experience for academic staff in higher education institution. Table 4 shows that participants

with 5 to 8years and more than 8 years of experience at the institution scored significantly higher (practically significant difference, medium effect) on job characteristics, work relationships and control than those with less than 5 years of experience. With regards to organisational commitment, participants

with 1 to 4 and 5 to, 8years years of experience at the institution scored significantly low on affective commitment and continuance commitment than individuals with more than 8 years of experience at the

institution (practically significant difference, medium effect). Lastly, both participants with 1 to 4 years, 5 to 8years and more than 8 years scored high on normative commitment.

Table 4. ANOVAS- Differences in ASSET and Allen and Meyer Scores of Years of Experience Categories

<i>Dimension</i>	<i>1-4years</i>	<i>5-8 years</i>	<i>More than 8 years</i>	<i>P</i>	<i>Root SME</i>
Work life balance	9.56	9.89	8.12	0.10	3.71
Resources and communication	8.39	9.13	9.79	0.05	3.86
Work Relationships	9.03	10.98 ^b	11.40 ^b	0.23	5.88
Overload	9.86	9.87	10.01	0.07	4.11
Job Security	10.78	10.12	11.42	0.36	3.98
Job control	10.27 ^b	11.19 ^b	14.18 ^b	0.00*	4.73
Job characteristics	11.63	12.63 ^b	13.21 ^b	0.00*	6.02
Affective commitment	18.91 ^b	19.73 ^b	21.84 ^b	0.00*	3.96
Normative commitment	21.66 ^b	22.66 ^b	20.02 ^b	0.00*	4.86
Continuance commitment	19.08	20.67	22.04	0.06	4.02

Note: Statistically significant difference: $p = 0.01$, a practically significant differences from category (in row) where b (medium effect, $d = 0.5$) or c (large effect, $d = 0.8$) are indicated.

According to Table 5, IsiZulu, Sepedi and other language (foreign) speaking group scored practically significantly higher on Work relationships (practically significant difference, medium effect) than Tshivenda and Xitsonga speaking language groups. The Tshivenda, Sepedi and Xitsonga speaking language groups scored practically significant higher on overload (practically significant difference, medium effect) as compared to IsiZulu speaking group. However, The IsiZulu speaking language group also scored significantly high on overload (practically significant difference, small effect) as compared to other language speaking group.

With regards to organisational commitment, Tshivenda, Sepedi and Xitsonga speaking language

group scored practically significantly high on Affective commitment (practically significant difference, small and medium effect) than IsiZulu and other language speaking group. In terms of normative commitment, other language speaking scored practically significantly higher (practically significant difference, medium effect) as compared to Tshivenda, Sepedi, IsiZulu and Xitsonga language speaking group. Lastly, Tshivenda, Xitsonga and Sepedi speaking language groups scored practically significantly high on continuance commitment (practically significant difference, medium effect) than the IsiZulu, and other language speaking groups.

Table 5. ANOVAS- Differences in ASSET and Allen and Meyer Scores of Different Language Groups

<i>Dimension</i>	<i>Tshivenda</i>	<i>IsiZulu</i>	<i>Sepedi</i>	<i>Xitsonga</i>	<i>Other</i>	<i>P</i>	<i>Root SME</i>
Work life balance	6.04	7.22	8.12	6.14	8.05	0.04	3.81
Resources and communication	9.14	7.55	9.79	9.12	9.21	0.08	3.66
Work Relationships	9.55 ^b	14.23 ^b	12.80 ^b	8.53 ^b	14.23 ^a	0.01*	6.88
Overload	14.62 ^a	10.17	13.01 ^a	12.09	9.55 ^b	0.09	4.11
Job Security	11.04	11.12	11.22	10.78	11.81	0.86	5.98
Job control	12.58	11.19	9.18	12.32	11.04	0.09	4.73
Job characteristics	14.28	15.45	12.21	13.22	14.08	0.67	4.02
Affective commitment	22.11 ^b	18.15	21.84	18.11	17.14 ^a	0.00*	5.56
Normative commitment	18.22 ^b	19.18 ^b	17.12 ^b	21.07	22.21 ^a	0.01*	4.86
Continuance commitment	23.23 ^b	20.01 ^a	22.28 ^b	22.09 ^b	19.18 ^a	0.00*	6.89

Statistically significant difference: $p = 0, 01$, a practically significant differences from category (in row) where b (medium effect, $d = 0.5$) or c (large effect, $d = 0.8$) are indicated.

5 Discussion and conclusion

The first objective of this study was to determine the levels of occupational stress and organisational commitment of employees. Secondly, the study was aimed to determine occupational stress and

organisational commitment levels of employees based on demographic differences of employees (experience and language).

In determining the level of occupational stress, standardised ten scores (sten) were used. The results showed that job characteristics and job control were

the most significant stressors in the whole organisation followed by work relationships and job overload. In addition, it was found that these occupational stressors led to lower levels of affective and continuance commitment.

In this study, the results should not be understood in isolation but also in full consideration of the present internal and external factors affecting higher education institutions in South Africa. The restructuring of higher education institution, fast changes in technology, financial predicaments, and growing number of student enrolment and increase in globalisation have radically changed many aspects of the teaching job creating emotional turmoil and stress for academic staff members (Sparks, Faragher & Cooper, 2001; Tennant, 2001). In addition, the broader transformation of the South African higher education system including the merger of universities and technikons has led to significant increase in stress (Oosthuizen & Berndt, 2008). According to Seldin (1991), this situation is likely to endure and there are prospects that current and future academic staff member of higher education institutions in South Africa might likely continue to experience increasing levels of occupational stress.

As far as organisational commitment, of academic staff members in the institution in concerned, all the occupational stressors excluding work life balance and pay contributed to low affective commitment and continuance commitment. According to Kahn and Byosere (1992), if occupational stress is left unmanaged, it may result to psychological and physical ill-health of employees hence negatively affecting their commitment towards the organisation. Occupational stressors about work relationships, job characteristics, overload, lack of control and lack of resources seem to be most significant stressors associated with low organisational commitment. The impact of the mentioned above stressors can be easily understood if one considers the background of the South African institutions and the transformation that it has gone through, the growth in student enrolments without a proportion increase in academic staff (Viljoen and Rothman, 2009).

As far as work relationship is concerned, the concept of diversity which reflects the difference of in cultures, values and principles of employees need to be considered. Diversity is also reflected in higher education institutions with women and young age groups increasing in the teaching job (Maingi & Makori, 2015) Conflict can easily arise between people when working together, especially when they are not like-minded, with different ideas, views, experiences and perspectives (Worman, 2005). Therefore diversity should be considered when investigating the existence of stress in individuals and the way they behave in order to deal with the stress.

With regards to job characteristics, increase in student enrolment, different values and principles, poor economic and educational backgrounds resulting

in low pass rates especially rural based universities is seen to be a contributing factor to stress Viljoen & Rothmann (2009). The need by university leaders to be amongst leading universities in research output in South Africa also increases pressure towards academic staff not to focus only on lecturing but also participate more in conducting research. In addition, the change from a teaching college to a university also brought subsequent pressure on staff to increase their level of qualification to PHD and professorship thus leading to high job and personal demands. However, according Viljoen and Rothmann (2009), the fact that the name has been changed from college to a university puts the institution in the sphere of traditional universities of which most of them have competitive advantage.

Stress about job control can be a result from a formal, rigid and bureaucratic management system in the university. Although it is important for the institution to ensure better employee performance and provision of quality services, employees might be negatively affected by this. A bureaucratic management system prevents employees to make their own decision regarding on what, how and when to perform their tasks. According to Coetzee and Rothmann (2006), employees who perceive lack of control towards many aspects of their jobs and also lack of individual influence towards their performance targets might likely experience stress and low organisational commitment.

To determine the best predictors of organisational commitment, standard multiple regression analysis was computed with occupational stressors included as predictors and organisational commitment as dependent variables. A statistically significant model was produced where the main predictors were resources and communication, job overload and job control. With regard to resources and communication, it appears that lack of proper equipment, lack of information and lack of training are major predictors of low affective commitment, continuance commitment and normative commitment. These results support the findings by Coetzee and Rothmann, (2006) that resource and communication was the main source of occupational stress resulting in low organisational commitment. Furthermore, the results support the findings of Bakker, Demerouti, De Boer and Schaufeli (2003) who found that lack of individual decision making, lack of information and lack of training impedes goal achievement which likely results in reduced job dissatisfaction. As such, according to the researcher, employees get detached to their job which feasibly is a sign of reduced organisational commitment.

Even though a statistically significant model was generated when occupational stressors were regressed upon affective commitment, normative and continuance commitment, almost all the occupational dimensions were insignificant. However, job overload nearly approached a statistical significance when regressed with normative commitment and if not dealt

with, could result in low normative commitment. In this case it means that participants perceive unmanageable workload as amongst the major causes of high levels of occupational stress and reduced organisational commitment. This supports the findings by Jackson and Rothmann (2006) that educators normally experienced high levels of occupational stress due to work overload and therefore resulting to reduced organisational commitment.

In determining the level of occupational stress and organisational commitment based on demographic differences, one-way ANOVA analysis was used. With regards to occupational stress and organisational commitment levels based on years of experience, it is confirmed that employees with 5 to 8 years and more than 8 years of experience at the institution are perceiving characteristics of their jobs, work relationship and job control as a big source of stress. Notably, it seems that participants with 5 to 8 years and more than 8 years of experience find it stress full that they will be doing their job for the next coming five to ten years hence becoming demotivated and less committed to the organisation. According to Coetzee and Rothmann (2006), lack of variety of tasks in the teaching job result in employees perceiving the teaching as dull and boring therefore experiencing high occupational stress levels. Lack of promotion and increase in pay and benefits might be seen as amongst the reason why employees are showing low affective and continuance commitment. Furthermore, constant low pass rate of student in the institution can put pressure on academic staff members leading to stress and low affective and continuance commitment

The analysis of the level of occupational stress and organisational commitment based language reveals that IsiZulu, Sepedi and other language (foreign) speaking group scored practically significantly higher on Work relationships (practically significant difference, medium effect) than Tshivenda and Xitsonga speaking language groups. Stress about work relationship can be due to an inexistence of a properly defined culture which will enable employees to share ideas and knowledge with less conflicts (Oosthuizen & Bendt, 2008). In addition the management style and communication breakdowns can lead to poor work relation between the management and employees resulting in stress (Robbins & Coulter 1999).

Tshivenda, Sepedi and Xitsonga speaking language group scored practically significantly high on Affective commitment (practically significant difference, small and medium effect) than IsiZulu and other language speaking group. In terms of normative commitment, other language speaking scored practically significantly higher (practically significant difference, medium effect) as compared to Tshivenda, Sepedi, IsiZulu and Xitsonga language speaking group. Lastly, Tshivenda, Xitsonga and Sepedi speaking language groups scored practically significantly high on continuance commitment

(practically significant difference, medium effect) than the IsiZulu, and other language speaking groups.

7 Conclusions

The first objective was to determine the levels of occupational stress and organisational commitment of employees. In the past, working as an educator either in primary or secondary and higher educational institutes was regarded generally as stress free. However, due to the restructuring process, fast changes in technology and increase in globalisation have radically changed many aspects of the teaching job (Sparks, Faragher & Cooper, 2001). Therefore, educators have been experiencing high levels of occupational stress and low organisational commitment. In this study, individuals perceived work relationship, job overload, job control and job characteristics as major contributors to low organisational commitment (affective commitment and continuance commitment). With regards to organisational commitment, individuals experienced low organisational commitment levels on both affective commitment and continuance while normative commitment was high. The results shown by the multi regression analysis predict low organisational commitment levels due to job overload, job control, job characteristics and job resources.

The second objective was to determine the differences of occupational stress and organisational commitment based on demographic information of employees (experience and language). After completing the one-way analysis of variance (ANOVAs), results show that employees who have stayed in the institution for a long period of time at the institution perceive job characteristics, work relationships and control as their sources of stress as compared to employees with less experience. With regards to organisational commitment, participants with 1 to 4 and 5 to, 8years years of experience at the institution scored significantly low on affective commitment and continuance commitment than individuals with more than 8 years of experience at the institution (practically significant difference, medium effect). Lastly, both participants with 1 to 4 years, 5 to 8years and more than 8 years scored high on normative commitment.

8 Recommendations

In the future, it is essential for research in South Africa to focus on the prevalence of occupational stress in various occupations. The levels of occupational stress found in different occupational groups may assist in ascertaining occupations that are most at risk of the adverse outcomes of stress. The questionnaire is an important matter that should be rectified. The questionnaires should be standardised to suit South African conditions. This will ensure that the results obtained are based on the multi-cultural context

and conditions of South Africa; therefore this will ensure reliability.

References

1. Ahghar, G. (2008). The role of school organisational climate in occupational stress among secondary school teachers in Tehran. *International Journal of Occupational Medicine and Environmental Health*, vol. 21, pp.319–329.
2. Allen, N., & Meyer, J. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organisation. *Journal of Occupational Psychology*, vol. 63, pp.1-18
3. Anderson, G. S., Litzenberg, R., & Plecas, D. B. (2008). Physical evidence of police officer stress. *Policing: An International Journal of Police Strategies & Management*, vol. 25, pp. 399-420.
4. Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources and Job demands as predictors of absence duration and frequency. *Journal of Vocational behaviour*, vol. 62, pp. 341-356.
5. Barkhuinez, N. (2005). *Occupational stress of academic staff in South African higher educational institutions*. Unpublished doctoral thesis, North-West University, Potchefstroom, SA.
6. Barkhuizen, N., & Rothmann, S. (2008). Occupational stress of academic staff in South African higher education institution. *South African Journal of Psychology*, vol. 28, pp. 321-336.
7. Bell, E., & Barkhuizen, N. (2011). The relationship between barriers to change and the work engagement of employees in a South African property management company. *South African Journal of Industrial Psychology*, vol. 37, pp. 1–11.
8. Benligray, S., & Sonmez, H. (2012). Analysis of organisational commitment and work–family conflict in view of doctors and nurses. *The International Journal of Human Resource Management*, vol. 23, pp. 3890-3905.
9. Blix, A. G., Cruise, R. J., Mitchell, B. M. & Blix, G. G. (1994). Occupational stress among university teachers. *Educational Research*, vol. 36, pp. 157-161.
10. Carrel, W. R., & Wayar, T. (2008). *The effects of human resource management strategies on cutomers-employees' interaction in call centres*. New York, USA: SAGE Publication Ltd.
11. Cartwright, S., & Cooper, C. L. (2002). *ASSET: An Organisational stress Screening Tool-The Management Guide*. Manchester: RCL Ltd.
12. Chinnammai, S. (2005). Effects of globalisation on education and culture. *International Review Research Papers*, vol. 5, pp. 13-21.
13. Coetzee, S. E., & Rothmann, S. (2005). Occupational stress, organisational commitment and ill health of employees at higher educational institution in South Africa. *South African Journal of Industrial Psychology*, vol. 31, pp. 47-54.
14. Cooper, C. L., & Dewe, P. J. (2001). *Organisational stress: A review and critique of theory, research and applications*. Thousand Oaks, CA: Sage Publications
15. De Witt, H. (2005). Job insecurity: Review of the international literature on definitions, prevalence, antecedents and consequences. *South African Journal of Industrial Psychology*, vol. 31, pp. 1-6.
16. Demerouti, E., Bakker, A. B., Nachreiner, F & Schaufeli, W. B. (2000). A model of burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing*, vol. 32, pp. 454-464.
17. Dollard, M. F., Winefield, A. H., & Winefield, H. R. (2003). *Occupational stress in the service professions*. New York, USA: Taylor & Francis.
18. Earley, P. (1994). *Lecturers' workload and factors affecting stress levels*. Slough, UK: NFER.
19. Edwards, J., Cable, D., Williamson, I., Lambert, L., & Shipp, A. (2006). The phenology of Fit: linking the person and environment to the subjective experience of person fit. *Journal of Applied psychology*, vol. 91, pp. 802-827.
20. Faragher, E. B., Cooper, C. L., & Cartwright, S. (2004). A shortened stress evaluation tool (ASSET). *Stress and Health*, vol. 20, pp. 189-201.
21. Geese, D., & Moss, B. (2001). *Reversal theory, stress and health*. Washington DC, USA: Taylor and Francis.
22. IBM-SPSS Inc. (2013). *SPSS 19.0 for windows*. Chicago, IL: SPSS Inc.
23. Industrial Society. (2001). *Managing best practice: Research Summaries No. 83: Occupational Stress*. London, UK: Industrial Society
24. Jackson, L. T. B., & Rothman, S. (2006). Occupational stress, organisational commitment and ill-health of educators in the Northern West Province. *South African Journal of Education*, vol. 26, pp. 75-95.
25. Johnson, J. V., & Hall, E. M. (1988). Job strain, workplace social support, and cardiovascular disease: A cross-sectional study of a random sample of the Swedish working population. *American Journal of Public Health*, vol. 78, pp. 1336-1342.
26. Kahn, R. L., & Byosiere, P. (1992). Stress in organisation. In M.D Dunneite (Ed), *Handbook of industrial psychology* (pp. 557-648). Chicago: Rand McNally.
27. Karasek, R., & Theorell, T. (1990). *Healthy work*. New York, USA: Basic Books
28. Kinman, G. (2008). Pressure points: A review of stressors and strains in UK academics. *Educational Psychology*, vol. 21, pp. 474-492.
29. Lainas, A. (2010). Local directors of school of education in Greece: Their role and main sources of job stress. *Educational Management Administration and Leadership*, vol. 38, pp. 454–471.
30. Mahommed, F. E., & Naude, J. L. P. (2006). Occupational stress and strain of support staff at higher education institution in the North West Province. *Unisa Press*, vol. 20, pp. 91-104.
31. Maingi, J., & Makoni, M. (2015). Effect of Workforce diversity on employee performance in Kenya: A case study of Kenya school of government. *The Strategic Journal of Business and Change Management*. Vol. 2, pp. 343-364.
32. Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organisational commitment. *Human Resource Management Review*, vol. 1, pp. 61-89.
33. Morrow. P. C. (1983). Concept redundancy in organisational research: The case of work commitment. *Academy of Management Review*, vol. 8, pp. 486-500.
34. Mostert, F. F., Rothmann, S, Mostert, K., & Nell, K. (2008). Outcomes of occupational stress in a higher education institution. *Southern African Business Review*, vol. 12, pp. 102–127.

35. Mostert, F. F., Rothmann, S., Mostert, K., & Nell, K. (2008). Outcomes of occupational stress in a higher education institution. *Southern African Business Review*, vol. 12, pp. 102-127.
36. Nunnally, J. C., Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York, USA: Mc Graw-Hill.
37. Oluyado, L. (2013). Social effects of organisational restructuring on employees: Workplace attitudes in selected manufacturing industries in Nigeria. *African Research Review*, vol. 7:3, pp. 109-116.
38. Oosthuizen, F. J., & Berndt, A. (2011). Academic employees presenting stress management behaviour in a diverse context
39. Ramanov, K., Appelberg, K., Honkasalo, M. L., & Konsekenvou, M. (1996). Recent interpersonal conflict at work and psychiatric morbidity: A prospective study of 15 530 employees aged 24-64. *Journal of Psychosomatic Research*, vol. 40, pp. 169-176.
40. Reddy, L. G., & Poornima, R. (2012). Occupational Stress and Professional Burnout of University Teachers in South Africa. *International Journal Educational Planning and Administration*, vol. 2:2, pp. 109-124.
41. Reddy, L. G., & Poornima, R. (2012). Occupational Stress and Professional Burnout of University Teachers in South Africa. *International Journal Educational Planning and Administration*, vol. 2:2, pp. 109-124.
42. Robbins, S. P., Judge, T. A., Odendaal, A., & Roodt, G. (2009). *Organisational behaviour: Global and Southern African perspectives*. Cape Town, SA: Pearson Education.
43. Rothman, S., & Coetzee, S. E. (2005). Occupational stress, organisational commitment and illhealth of employees at higher educational institution. *South African journal of Industrial Psychology*, vol. 31:1, pp. 47-54.
44. Schafer, W. (2000). *Stress management for wellness*. New York: Harcourt College Publishers.
45. Schaufeli, W. B., Maslach, C., & Marek, T. (Eds.). (1993). *Professional burnout: Recent developments in theory and research*. Washington, DC: Taylor & Francis.
46. Seldin, P. (2002). Reducing stress on campus. *Planning for Higher Education*, vol. 9:4, pp. 14-20.
47. Shen, Y., & Gillivan, M. (2004). An empirical test of the job demand/cpntrol model among IT users. In S. Weisband (Chair). *Supporting end users*. Special Interest Group on Computer Personnel Research Annual Conference: Proceedings of the 2004 SIGMIS conference on computer personnel research: Careers, culture and ethics in a networked environment. *SIGMIS 4*, 31-47. Retrieved on November 4, 2005 from <http://portal.acm.org/citation.cfm?id=982382>.
48. Spector, P. E. (2002). Employee control and occupational stress. *Current Direction in Psychological Science*, vol. 11, pp. 133-136.
49. Spurgeon, A., Harrington, M. J., & Cooper, C. L. (2000). Health and Safety problems associated with long working hours: A review of the current position. *Occupational and Environmental Medicine*, vol. 54, pp. 367-375.
50. Stern, M. S., & Kamper, G. D. (2006). Understanding occupational stress among educators: an overview. *Africa Education Review*, vol. 3:3, pp. 113-133.
51. Suliman, A. M., & Iles, P. A. (2000). The multi-dimensional nature of organisational commitment in a non-western context. *Journal of Managerial Psychology*, vol. 19, pp. 1-7.
52. Swanger, M. (2005). Wellness council: Healthy employees more productive. *Des Moines Business Record*, 8.
53. Teller, A., Ayeni, C. O., & Popoza, S. O. (2007). Work motivation, Job satisfaction and Organisational commitment. *Journal of Social Psychology*, vol. 14:2, pp. 113-123.
54. Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, vol. 4, pp. 178-190.
55. Topper, E. F. (2007). Stress in the library. *Journal of New Library*, vol. 108:11, pp. 561-564.
56. Tytherleigh, M. Y., Webb, C., Cooper, C. L., & Rickens, C. (2005). Occupational stress in UK higher education institutions: A comperative study of all staff categories. *Higher Education Research and Development*, vol. 24, pp. 41-59
57. Vakola, M., & Nikolau, I. (2005). Attitudes towards organisational change: What is the role of employees's stress and commitment? *Applied Psychology: An international Review*, vol. 5, pp. 527-544.
58. Vermunt, R., & Steensma, H. (2005). How can justice be used to manage stress in organisation. In J. Greenberg., & J. A. Colquitt (Eds.), *Handbook of Organisational Justice* (pp. 383-410). Erlbaum, NJ: Mahwah.
59. Voydanoff, P., & Donnelly, B. W. (1999). Multiple roles and psychological distress: The inetresection of the paid worker, spouse and parent roles with the role of the adult child. *Journal of Marriage and the Family*, vol. 61, pp. 725-738.
60. Weinberg, A., Cooper, C. (2007). *Surviving the workplace: A guide to emotional wellbeing*. London: Thompson.
61. Wevers, N. E. J., & Steyn, G. M. (2002). *Opvoeders se perspiesies van hulle werkmotiering; N Kwalitattiewe studie*. South African Journal of Education, vol. 22, pp. 205-212.
62. Whitlock, R.W. (2010). *A critical anaylsis of service quality perceptions of vehicle repair and mantainance retailers*. MBA. Nelson Mandela Metropolitan University. [online]. Available from: <https://www.nmmu.ac.za>. [Accessed 24 April 2013].
63. Winefield, A. A., Gillepsie, C. Stough, C., & Dua, J., Hapurachchi, J., & Boyd, C. (2003). Occupational stress in Australlian University staff. *International Journal of Stress Management*, vol. 10:1, pp. 51-63.