Factors influencing operational performance for SMMEs

in the Textile and Clothing manufacturing sector

in the eThekwini district

By

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DECLARATION

I, Sbonelo Comfort Dladla, declare that:

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ABSTRACT

Small, medium and micro enterprises (SMMEs) play a pivotal role in the economy of a country through job creation, development and dealing with the issue of unemployment, all of which affect the government and its citizens. Therefore, it is important that SMMEs operate efficiently and run their businesses effectively in order to grow within their respective sectors.

The low rate of success amongst SMMEs in South Africa (SA) over the years indicates that there are factors hindering the efforts of the country's SMMEs from operating efficiently (Turton and Herrington 2012: 48). One of the factors is poor operational performance which is frequently quoted as a leading cause of failure amongst SMMEs within the manufacturing sector (Urban and Naidoo 2012: 146). Furthermore, the Economic Development and Growth in eThekwini (EDGE) (2013: 37-38) reveals that SMMEs within the textile and clothing manufacturing sector in the eThekwini district generally do not innovate and suffer from a lack of access to financial services.

The study population was 94 small and micro enterprises (SMEs) in the textile and clothing manufacturing sector in the eThekwini district. The researcher could not find a data on medium enterprises as prospective participants in the study and obtained only 80 SMEs. A quantitative approach was used in the context of a census study. The study was descriptive and conclusive in nature.

The results of the study indicate that SMEs apply innovative processes in their businesses and work at a favourable physical environment within eThekwini district. However, SMEs do not have sufficient access to government financial incentive schemes (GFIS) which could be a factor inhibiting their growth and development. Furthermore, despite the fact that many of the SMEs in the study agreed that assistance from government schemes can enhance their operational performance, almost half of them were not aware of relevant schemes. Therefore, it is important that the government, that is, the Department of Trade and Industry (dti) and Small Enterprise Development Agency (seda) and other relevant government agencies, reach out to as many of these SMEs as possible. This is an opportunity for the SA government to improve their efforts to create more jobs for SA citizens.

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ANC	African National Congress
BBSDP	Black Business Supplier Development Programme
BEE	Black Economic Empowerment
CAD	Computer-aided design
CAGR	Complex Annual Growth Rate
CAM	Computer-aided manufacturing
CAT	Computer-aided training
CIT	Computer-integrated manufacturing
CTFL	Clothing, Textile, Footwear and Leather
dti	Department of Trade and Industry
EDGE	Economic Development and Growth in eThekwini
EDI	Electronic Data Interchange
FRC	Faculty Research Committee
GFIS	Government Financial Incentive Scheme
ICT	Information and Communication Technology
IDA	Index Decomposition Analysis
IWF	Isivande Women's Fund
JIT	Just-in-time
KZN	KwaZulu-Natal
LPIDA	Labour Productivity Index Decomposition Analysis
MIP	Manufacturing Investment Programme
NGO	Non-governmental organisation
NYDA	National Youth Development Agency
PFEE	Project Funding for Emerging Exporters
SA	South Africa
seda	Small Enterprise Development Agency
SME	Small and Micro Enterprise
SMME	Small, Medium and Micro Enterprise
SPSS	Statistical Package for the Social Sciences

SSAS	Sector-Specific Assistance Scheme
TISA	Trade and Investment South Africa
WIP	Work-in-process

CHAPTER 1 : INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Introduction

Small, medium and micro enterprises (SMMEs) play a pivotal role in the economy of a country through job creation, development and dealing with the issue of unemployment, all of which affect the government and its citizens. Therefore, it is important that SMMEs operate efficiently and run their businesses effectively in order to grow within their respective sectors. The capacity of SMMEs to encounter and accommodate rising consumer expectations is mainly based on their ability to innovate and deliver new products at reasonable prices (O'Regan, Ghobadian and Sims 2005: 1). Innovation is a crucial factor in sustainable competitive advantage and is one of the key challenges for SMMEs in order to enhance their operational performance. In addition, the achievement of a business lies in the way a business describes, comprehends, and faces changes in its physical environment (Magaisa, Duggal and Muhwandavaka 2013: 593). Thus, operating in a conducive environment enhances the operational performance of the business.

Having introduced the importance of SMMEs in the country and the value of innovation for operational performance, the following section will discuss the background to the study.

1.2 Background to the study

South Africa (SA) has unquestionably for many years been, and continues to be, one of the world's most intensely divided and mentally stressed countries (Visagie 1997: 661). Thus, it can be assumed that political, educational and economic institutions need exceptional measures and assistance to repair the difficulties confronting South Africans. In 1994, democracy was embraced in SA when the country had its first democratic election and the African National Congress party (ANC) brought to government a noticeable awareness of the outside world and progressive ideas about how the new government was going to rearrange the development of the country.

The 1995 White Paper on small business was sanctioned by the SA Parliament to set the precise framework for SMME development (Peters and Naicker 2007: 13;

Rogerson 2010: 766). This, together with the National Small Business Development Act of 1996, cemented the way for the unveiling of an array of new support institutions and enterprises. It was evident that the government perceived SMMEs to be agents of employment promotion, redistribution, and global competitiveness.

In SA, small business is described as a distinct and separate business unit, together with cooperative enterprises and non-governmental businesses, controlled by a single owner or more which, comprising its subdivisions or affiliates, if any, is largely carried on in any division or sub-division of the economy and which can be categorised as a very small, a small, a micro or a medium enterprise (SMME) (Mbonyane and Ladzani 2011: 550-551). SMMEs are fundamental to the growth of national economies (Manuere, Gwangwava and Gutu 2012: 1142). Dalberg Global Investment Advisors (2011: 4) state that SMMEs play an important role in the economic fabric of developing countries through furthering growth, innovation and prosperity. Table 1.1 shows the National Small Business Act's classification of SMMEs in South Africa.

Table 1.1: SMME classification as per the National Small Business Act

Enterprise Size	Number of employees	Annual turnover (in ZAR million)	Gross asset value (excluding fixed property, in ZAR million)
Micro	Fewer than 5	Less than R150 000	Less than R100 000
Very Small	Fewer than 10 to 20 depending on industry	Less than R200 000 to R500 000 depending on industry	Less than R150 000 to R500 000 depending on Industry
Small	Fewer than 50	Less than R2m to R25m depending on industry	Less than R2m to R4.5m depending on Industry
Medium	Fewer than 100 to 200, depending on industry	Less than R4m to R50m depending on industry	Less than R2m to R18m depending on Industry

Source: Underhill Corporate Solutions 2011: 24

SMMEs in Africa normally rely upon their personal savings or the savings of their family because access to capital is a challenge for them (Okpara and Wynn 2007: 24). From a gender point of view, Abdullah (2004: 69) is of the view that female SMME owners lack business experience although are more advanced in their schooling levels, suffer from the responsibility of innovation and their financial performance are lower than male SMME owners.

It is known, globally, that SMMEs are vehicles for development and growth (Gill and Biger 2012: 657). However, SMMEs encounter many challenges that hinder their growth. Urban and Naidoo (2012: 147) state that SMMEs come across an extensive range of limitations, which inhibits them from gaining and upholding a competitive position in their relevant activities. Perks (2010: 220) points out that only two out of every five businesses established will survive for six or more years, and a small number will accomplish considerable growth throughout the first four years. As if that is not enough, China and India have upped their game in the manufacturing sector through their low-priced manufactured products (Terziovski 2010: 892-893). SMMEs are now battling to find ways of competing with China and India.

Both SMMEs and big companies apply innovation practises and formal structures in enhancing their business performance (Terziovski 2010: 892-893), but SMMEs do not use innovation in a planned and organised way.

Having discussed the study background, the following sections will present the problem statement, the aim and objectives, significance of the study, the influence of the literature review in the study, research methodology and structure of the dissertation.

1.3 Problem statement

SMMEs are often said to be the driving force in the promotion of the economy and considered as the main drivers for innovation (Subhan, Mehmood and Sattar 2013: 2). Therefore, in many countries, government has paid much attention to enhancing their operational performance. However, Mathibe and Van Zyl (2011: 101) reveal that many SMMEs are not aware of government financial incentives and are even less knowledgeable as to where to access finance. Dalberg Global Development Advisors (2012: 5) add that SMME growth faces a number of challenges such as access to finance, market access, skills and networks, and an enabling environment.

In countries that are developing, there is a recognition that lasting growth and competitiveness of SMMEs is compromised by the limitations on their access to different methods of finance in order to improve their operational performance (Migiro and Wallis 2006: 2). SMMEs in SA do indeed face the challenge of non-availability of financial assistance (Fatoki and Odeyemi 2010: 128).

Another problem, identified by Urban and Naidoo (2012: 147), is that SMMEs lack the skills and expertise to carry out their operational systems efficiently. According to Thompson, Williams and Thomas (2013: 934) SMMEs need to be more innovative to enhance their growth. Jorosi (2010: 224) argues that they do not have proper infrastructure and enough resources to be consistently competitive where they operate. Many SMMEs are susceptible in that they operate in sectors where they have little control over suppliers of their necessities and must, therefore, work in a reactive way in response to a continuously varying environment (Achanga, Shehab, Roy and Nelder 2006: 460).

Hence, this study will investigate the factors influencing operational performance of SMMEs in the textile and clothing industry. This industry plays a crucial role in the SA economy. Furthermore, it has created numerous opportunities for South Africans, particularly Black South Africans as they dominate in terms of population (SouthAfrica.info 2009). Additionally, SMMEs in the textile and clothing industry hire thousands of people in SA and government has spent over R9 billion on improving and renovating SA's textile, clothing and footwear industry (SouthAfrica.info 2009).

The disorder in worldwide markets has left the SA clothing and textile sectors predominantly defenceless (KZN Clothing and Textile Cluster 2012), and a considerable share of the textile and clothing vended in SA is imported. This, together with a deteriorated Rand, has put stress on the sectors' employment stability. Furthermore, SA manufacturers' inability to seize the national market signifies an enormous opportunity lost resulting in the enormous growth of imported clothing merchandise from China and other low-cost manufacturers.

1.4 Aim and objectives of the study

This study will investigate the factors influencing the operational performance of SMMEs in the textile and clothing manufacturing sector in the eThekwini district. Extensive globalisation continues to be a threat to SA textile and clothing industries when one considers countries like China and India which are utilising the opportunities available to be strongholds in the textile and clothing industry. It is important, nonetheless, to look internally and within where the SMMEs operate as they also encounter challenges besides the problem of outsiders. The following objectives were considered in achieving the overall aim of the study:

❖ To examine if the awareness of government financial incentives influence the operational performance of SMMEs;

❖ To evaluate if innovative processes influence the operational performance of SMMEs; and

❖ To investigate if the extent of the physical environment influences the operational performance of SMMEs.

1.5 Significance of the study

South Africa is a developing country and has numerous resources that can support SMMEs to be well developed. However, the growth and development of SA's SMMEs is lagging behind compared to other African countries who have less resources. Turton and Herrington (2012: 48) reveal that SA's consistently low rate of success amongst SMMEs over the years indicates that a number of factors are hindering their efforts to operate efficiently. As a result, operational performances are hampered and frequently quoted as a leading source of failure amongst SMMEs within the manufacturing sector (Urban and Naidoo 2012: 146). According to Voss, Ahlstrom and Blackmon (1997: 1048) operational performance refers to the measurable aspects of the outcomes of an organisation's processes such as reliability, effectiveness, production cycle time, and inventory turns. Economic Development and Growth in eThekwini (EDGE) (2013: 37-38) reveals that SMMEs within the textile and clothing manufacturing sector in the eThekwini district generally do not innovate and also suffer from a lack of access to financial services.

This study will be conducted to determine whether SMMEs in the textile and clothing industry in the eThekwini district encounter factors such as access to government financial incentive schemes, innovative processes and a supportive physical environment. This will assist the government to know where they are in terms of supporting the SMMEs and whether the SMMEs are getting the support from the government that is allocated to them. Furthermore, it will let the SMMEs in the textile and clothing industry know if innovative processes and the extent of physical environment are hindering their success or not.

1.6   Research methodology

A research problem can be addressed through an organised research approach. Research methodology shows how the research will be carried out (Rajasekar, Philominathan and Chinnathambi 2013: 5). The influence of the literature review in the study, as well as the research design and the target population will be highlighted in the following subsections.

1.6.1   The Influence of literature review in the study

The literature review will be guided by the objectives of the study. The aim of the literature review is to gather information that is in line with the objectives of the study. It will review operational performance, SA government's policies in relation to SMMEs, innovative processes, and the role of the physical environment. Moreover, it will allow the researcher to create questions which will be included in the questionnaire of the study.

1.6.2   The research design and target population

A quantitative approach was used in this study in that the researcher gathered numerical data. The study was descriptive and conclusive in nature. The researcher intended to obtain responses from small, medium and micro enterprises, but could not find any medium enterprise as a participants in the study. Thus, only small and micro enterprises will be actual participants. A case control was executed since the researcher focused only on the SME owners who were expected to have information pertaining to their enterprises. A total of 80 SME owners in the textile and clothing industry of the eThekwini district were studied.

The research approach was organised as follows.

- **Reliability and validity:** Cronbach's Alpha was used as a tool to measure the reliability of the questionnaire. The tool checked whether the variables measured were stable or constant. The score of 0.842 for operational performance; 0.928 for innovative processes and 0.926 for physical environment were achieved. In addition, construct validity was checked to ensure that the variables being measured were actually being tested. According to Laerd Dissertation (2012) construct validity can be regarded as an all-embracing word to assess the validity of the measurement process (for instance, a questionnaire) that is utilised to

assess a particular construct. The literature review was influential in determining the variables to be tested.

- **Study participants:** the study had the target population of 94 SMEs. However, only 85% of the SMEs were found and participated in the study.

- **Measuring instrument:** the study used a questionnaire as a measuring instrument. Moreover, the questionnaire had closed-ended questions. The questioning technique allowed the participants to select answers amongst the given options so that the researcher could code the responses.

- **Recruitment process and data collection method:** the researcher sent a letter of information to every participant asking them to participate in the study. Some questionnaires were e-mailed to the participants whilst others were hand delivered. The participants were requested to complete the questionnaire within three days commencing from the date received. The researcher retrieved the completed questionnaires through hand collection.

- **Limitations:** due to time constraints and financial costs, the study was conducted within the eThekwini district focusing on the SMEs operating within the textile and clothing manufacturing sector.

1.7   Structure of the dissertation

The dissertation is structured in the manner outlined below.

Chapter 2: Literature review

The review of the literature and its significance to the study will be accomplished in this chapter. It will showcase the factors influencing operational performance of SMMEs such as government financial incentives and discuss the role of the South African government towards SMMEs and their awareness regarding financial incentive support. The chapter will explain innovative processes and discuss the innovative process and the framework of management innovativeness in relation to SMMEs, innovative process and their implementation, the innovative capacity, and the extent of physical environment which explored SMMEs' infrastructure.

Chapter 3: Research methodology

The approach to be executed in this study will be determined through the use of a suitable research design, creating a measuring instrument and selecting a data recruitment process and collection method. Furthermore, it will be determined through administering the questionnaire and the method for statistical testing.

Chapter 4: Data analysis and interpretation of results

In this chapter the analysis and interpretation of the data collected will be described. It will include the profiles of the participants, operational performance of their businesses and the government financial incentive scheme. It will examine the innovative processes of the businesses and the extent of physical environment's influence on operational performance of SMEs.

Chapter 5: Summary, recommendations and conclusions

This chapter will present the summary, recommendations and conclusions drawn from the research. The interpretation of data in Chapter 4 will be instrumental in presenting the attainments of the study objectives in this chapter.

1.8 Conclusion

An introduction to the study was covered in this chapter. It highlighted what the study intends to achieve. This chapter introduced the research background, problem statement, aim and objectives of the study, along with a framework of research methodology. Lastly, the chapter presented the structure for the dissertation.

The next chapter will deal with related literature of this study. The literature will discuss operational performance in business, government financial incentive schemes, innovative processes and the extent of physical environment.

CHAPTER 2 : LITERATURE REVIEW

2.1 Introduction

The preceding chapter explained the significant influence SMMEs have on the economy of any country, such as creation of jobs, increasing growth, innovation, prosperity and the promotion of the economy. It illustrated the aim of the study which is the investigation of factors which influence the operational performance of SMMEs in the textile and clothing manufacturing sector.

The purpose of this chapter is to discuss the operational performance of businesses, the role of government regarding SMMEs, innovative processes of the business and the influence of their physical environment (that is, where they operate). The literature review proceeds as follows: it discusses operational performance of businesses, the role of the South African government towards SMMEs and their awareness of financial incentives. It then discusses the innovation process and the framework of management innovativeness on SMMEs, the innovation process and its implementation, and innovation capacity. Lastly, it discusses the extent of physical environment of SMMEs by exploring their infrastructure.

Having introduced the chapter, the following section discusses operational performance. The purpose of this literature review is to discuss the operational performance of business, as well as the measurement of performance.

2.2 Operational performance

Operational performance is the measurement of a business' performance against established or set indicators (Liker and Franz 2011: 2). This includes standard times, reliability, quality, labour indices, inventory control, and just-in-time. Sousa and Aspinwall (2010: 477) state that it is crucial for SMMEs to consider performance measurement in their business at all levels in order to detect difficulties and improve the efficiency of detailed responsibilities, to measure customer satisfaction, and to arrange strategic objectives. This is all undertaken to ensure that goods that are manufactured satisfy buyers' needs and are of good quality, competitively valued and delivered alongside outstanding customer services (Urban and Naidoo 2012: 149).

Policy makers perceive SMMEs as important to the growth and development of the SA economy (Urban and Naidoo 2012: 146). Moreover, operations are said to be the most vital functional of any business as it is at the centre of business. Thus, it is indispensable for SMMEs to improve skills in every administrative operational area. Figure 2.1 presents the Business Measurements Performance framework. This framework was inspired by Norek's model (Norek 2011: 92) regarding the determinants of an enterprise's innovative capacity.

Figure 2.1: Business' measurements performance
Source: Norek 2011: 92

These variables aim to reveal the importance of operational performance in business growth. They will be discussed in the following sub sections.

2.2.1 Standard times

Standard times or performance standards is the quantity of time it takes an ordinary competent staff person to complete a detailed mission working at a supportable level, while utilising given equipment, approaches, practices, implements, resources, and workplace preparations (De Beer and Rossouw 2013: 73). Moreover, performance standards are normally established in terms of amount, time and quality. Thus, it

should be the business owners' goal to apply, monitor and correct the standard times at their businesses to improve the standard of working.

Developing standard times assists organisers of the process to set goals for improved approximations of process limitations and manufacture administration (Al-Aomar, El-Khasawneh and Obaidat 2013: 95). Conversely, improper time standards may result in numerous failures and drawbacks (Langier 1963: 527), and can jeopardise the quality of production. SMME owners need tools that assist them to assign their personnel to workstations (Myny, De Bacquer, Van Hecke, Beeckman, Verhaeghe, and Van Goubergen 2010: 92), and such implements should be based on neutral time measurements.

2.2.2 Reliability of a product

The global market nowadays is easily conquered by an established new product that has a great degree of quality and reliability (Natarajan, Senthil, Devadasan, Mohan and Sivaram 2013: 1144). Zeng, Wen and Kang (2013: 15-16) define reliability as the expectation that a component will execute a necessary function for a particular time under specified functioning circumstances.

Kalaignanam, Kushwaha and Eilert (2013: 54) contend that recalling of a product has an important constructive influence on the reliability of a product. Furthermore, businesses are enthused to learn from recalling a product and enhance reliability. Bargelis, Cikotiene and Ramonas (2014: 97) argue that human issues, blunders and flaws of product and process design, conservation and manufacturing processes are the key causes of non-quality and unreliability of product. Kalaignanam *et al.* (2013: 41) suggest that improving the reliability of a product helps the business to avoid product recalls because when customers are unconvinced about the quality of the business due to numerous product recalls it could easily affect their purchase decisions.

2.2.3 Quality of a product

Delivering quality product has become a crucial edge for many businesses. They have made it a priority to manage quality and make new products standardised to customers' quality needs (Molina-Castillo, Calantone, Stanko and Munuera-Aleman 2013: 380). This means investing in methods that facilitate quality product

development. However, according to Brombacher, Hopma, Ittoo, Lu, Luyk, Maruster, Ribeiro, Weijters and Wortmann 2012: 873) small and medium enterprises (SMEs) are still struggling to offer products and services that meet customers' requirements. There are many factors that could hinder the goal of having a quality product, and one of them is the method applied in making a product. Molina-Castillo *et al.* (2013: 380) suggest that SMEs should have proper evaluation of methods for new product development that are quality assured, because unreliable methods could result in approving products that are faulty.

Customers have great anticipations when buying a product (De Beer and Rossouw 2013: 6). Thus, SMEs need to guarantee desirability, absence of flaws, reliability and lasting trustworthiness. Furthermore, business owners have to consider two types of qualities that take place in business, namely, internal quality and external quality (Molina-Castillo *et al.* 2013: 382). To manage the internal quality, owners have to assess whether the product performs as it is thought to, includes features that customers do not anticipate, or have a low likelihood of deteriorating. External quality is centred on the awareness of extrinsic signals of the customers. For instance, the origin of the country, warranty, price, or brand.

2.2.4 Inventory control

Inventory management is a dynamic control program which lets a business manage its production, transactions, procurements, deliveries and outflows (Rajeev 2008: 660). Moreover, the business' economic strong point and competitive position is influenced by the management of inventories since the style taken to inventory management directly touches operative capital, manufacture and customer service.

According to Mattsson (2007:115) the inventory control and movement of material in the supply chain concerns largely two matters. These include the time to order or deliver, and the quantity of order, namely one time-related and the other quantity-related concern. The manner in which the inventories of a business are controlled influences the achievement or failure of the business's supply chain (Kruger, Ramphal and Maritz 2013: 51). Thus, the levels of inventories should be as little as possible all through the chain. However, if levels are too low, this will inhibit a business from timeously distributing completed goods to the final customer. They further state that holding of needless inventory increases expenses, accruing from cost of raw

materials, workforce expenses, machine-time expenses, and numerous other expenses.

Rajeev (2008: 661) argues that many SMEs lack specialised proficiency and normally make choices based on instinct. As a result, their basic inventory management practices, and investments in inventory are not constantly priced correctly. Mbonyane and Ladzani (2011: 553) add that small businesses encounter a postponement in the growth of the business due to poor inventory control. This takes place since most of them lack daily contact with customers, offer no distinctive advertising, price alteration and the absence of new product features. Inventory management is helpful to the manufacturer in times of fewer customers and less demand (Kauremaa, Smaros and Holmstrom 2009: 1113). It is also helpful when the manufacturer experiences high demand of the product.

2.2.5 Labour indices

Index decomposition analysis (IDA) is a decomposition technique that is utilised to evaluate the influence of some driving forces on pointer alterations (Kostenko 2014: 324). Past information is utilised, normally from two phases in order to examine which factor variations have contributed most to an alteration in a pointer. Moreover, labour output index decomposition analysis is a numerical technique for scrutinising the influence of individual aspects of labour competence.

The structural logic model of labour productivity index decomposition analysis (LPIDA) is used to analyse labour indices. Although LPIDA has numerous factors, the literature review highlights factors which are relevant to this subsection. These include the average annual output per employee, average hourly output, the amount of hours worked by one employee, the amount of days worked by one employee, workday duration, factors related to savings of working hours per unit of output (reduced complexity) and factors related to changes in production price (Kostenko 2014: 328). The purpose of implementing LPIDA in the business is to improve its operational performance.
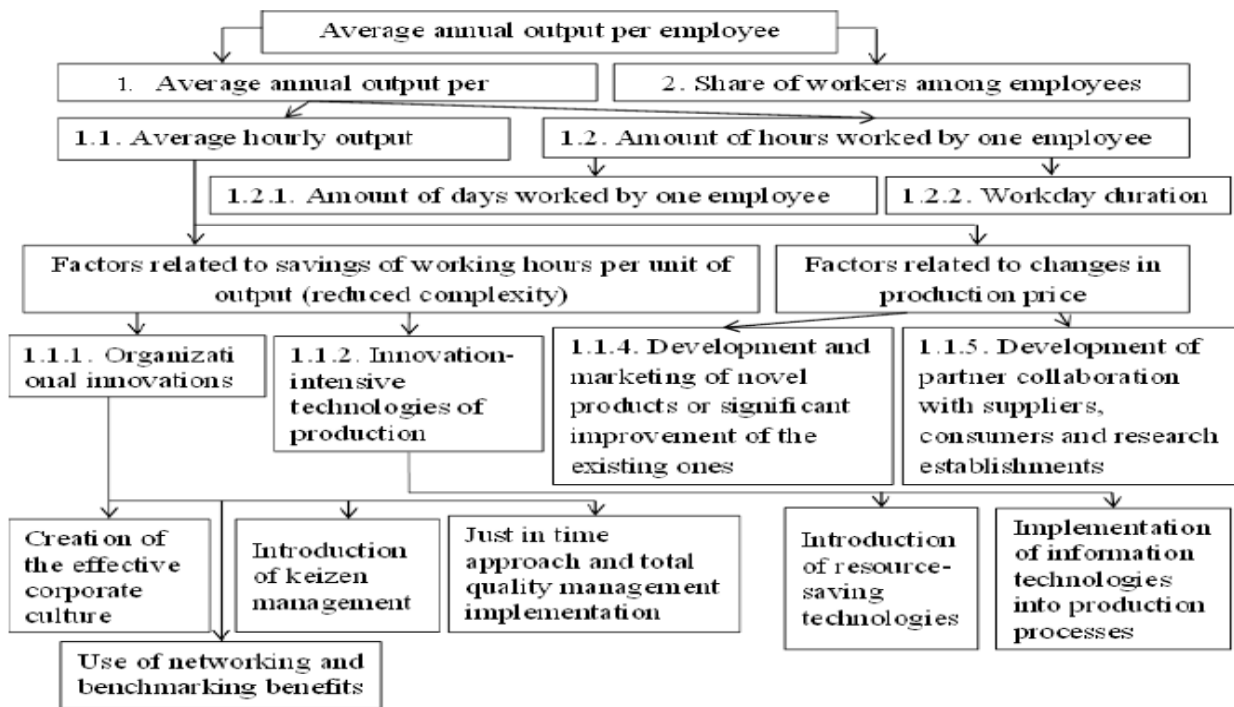
Figure 2.2: Average annual output per employee
Source: Kostenko (2014: 328)

The greatest overall pointer of labour productivity is the average output per worker (Kostenko 2014: 328). Its significance relies in the hourly productivity of the operational workers, their part in the entire amount of the workforce, and the amount of operational days. Assessing employee's work entails reconciling the hour, day, month, and year evaluation times (Hudgins and Gevrek 2015: 158).

2.2.6 Just-in-time (JIT) process

The JIT is an approach that aims to remove waste and to constantly enhance the manufacturing process (Bortolotti, Danese and Romano 2013: 1120). They further state that JIT processes are extremely convenient to enhance operational performance of the business. Moreover, the common conviction is that the application of JIT apparatuses is not beneficial when there is a high level of product customisation and demand variability, namely a non-repetitive setting, mostly because demand variations make takt time (that is, the determined production time required to meet the customer demand pace) dynamic and the high product variety hinders smoothing of production.

Academics consider JIT as one of the key elements of lean production comprising detailed arrays of practices and methods (Bortolotti *et al.* 2013: 1120). For instance, the JIT supply, set-up time reduction, production smoothing, daily schedule observance and flow oriented layout. They further show that JIT enhances most performance sizes, especially inventory turnover, manufacturing expenses, on-time distribution, cycle time, quick distribution and flexibility. In addition, there is no suffering in businesses that apply JIT when it comes to effectiveness since they do not have great volumes of inventories (raw materials, work-in-process (WIP), completed goods) and they merely produce with actual orders, and thus, they hardly have out-dated WIP or completed products when customer demand drops.

Having discussed the operational performance of the business, the next section discusses SA government support of SMME development. The aim of the literature review is to identify and discus the financial incentive schemes offered by SA government, and to discuss their influence on SMMEs.

2.3   Government support of SMME development

This section looks at the government support of SMME development. Government is classified as persons or groups that administer a community or unit which organises and oversees public policy and exercises executive, political and sovereign power via customs, institutions, and laws within a country (Dziobek, Jimnez de Lucio and Chan 2013: 4). Moreover, government can be categorised into a number of types, such as, democracy, republic, monarchy, aristocracy, and dictatorship. Chirwa and Nijzink (2012: 5) define government as the organisation that is bestowed with the power to implement civic authority within a country. They further state that civic authorities ought to perform in a way that reacts sufficiently to the requirements and anticipations of the public.

Small businesses have seen direct assistance from government rising (Richard 2009: 9). At the same time, the number of small businesses has likewise risen. Indeed, business assistance has become a thriving business area in its own right. Mbonyane and Ladzani (2011: 550) argue that the SA government originally did not provide sufficient assistance to the small business sector compared to larger companies. Oriaku (2012: 20) suggests that government should offer sufficient provision of curriculums and monetary accessibility to SMMEs.

Job development can be improved via government assistance to SMMEs (Abrie and Doussy 2006: 2). Thus, the SA government's intention is to provide suitable assistance policies which will be jointly focused and sectorally distinguished through government, the private sector and non-governmental organisations (NGOs). According to the Department of Trade and Industry (dti) (2013: 3) businesses in various sectors of the economy in SA have to qualify in order to receive financial support from them, as they seek to increase competitiveness and widen the involvement of enterprises in the economy. The SA government has focussed their attention on the essential mission of creating employment to generate maintainable and reasonable growth because of the current high rate of jobless and underemployed South Africans (Gstraunthaler and Cramer 2012: 59). Thus, SMMEs epitomise a significant instrument to address the task of employment creation, economic growth and equity in SA.

Sectors are not treated the same when it comes to government financial support programmes (Rogerson 2010: 772); it depends on the type of SMME business. For instance, about 25 percent of the clothing industry use SMME support programmes, compared with only 8 percent in tourism and a small 5 percent in information technology. Furthermore, non-exporting or low-growth SMMEs have less chances of getting government financial support programmes compared to exporting SMMEs or high-growth SMMEs. Additionally, the crucial focus seems to be only on three provinces, KwaZulu-Natal (KZN), Gauteng and Western Cape, thus chances of bias are high. Urban-based SMMEs have been the main recipients when it comes to access and awareness of SMME support programmes. However, Rogerson further argues that reliable and verified statistics concerning the influence and performance of government support programmes on the SMME economy as a whole are few.

In keeping with the above literature, the SA government has (or should have) a crucial role on SMME support, which does not only stop there, but goes all the way to enhancing the South African economy in terms of job creation, improvement in global competitiveness and enhancing infrastructure of premises. Under this section, the government financial incentive scheme (GFIS), awareness of GFIS, and access to GFIS will be discussed.

2.3.1 The government financial incentive scheme (GFIS)

Government supports businesses in many ways; GFIS is one of them. Their funding offsets external effects and fuels rivalry in the market (Boter and Lundstrom 2005: 245). Thus, providing financial support to SMMEs allegedly eradicates market inadequacies and kindles rivalry.

Looking at how GFIS is applied in India, Hameed (2011: 1) reports on how India introduced unique schemes that offer financial incentive to girls that are young at diverse periods of their life phase with the intention of ending an intergenerational history of unfairness and numerous deficiencies encountered by girls and women. The goal of these schemes is to enhance the worth of young girls, grounded on the evidence that the financial incentives would activate behaviour alterations in societies and families, particularly among parents that are immature. The notion was that this would improve the worth of the young girls and result in enhanced gender ratios at birth and enhanced child gender ratios, improving registration in schools and turnout in primary, and improve their age at bridal.

Nevertheless, the most important part of these schemes is the output. Hameed (2011: 2) states that in certain areas, the absence of organisation through in sectors such as education, social welfare and health is unfavourably disturbing application of the programme.

There are a number of factors that have been mentioned in the literature which hinder the growth of SMMEs, specifically in SA thus setting back the objective of the government in creating jobs. Business Innovation Skills (BIS) (2012: 2) reveals that approximately half of SMEs do not utilise proper sources of outside funding, as an alternative they depend on trade credit from their dealers or recollected incomes.

Figure 2.3 presents the role of government in SMMEs. The figure was inspired by Gnyawali and Fogel's model which was presented by Boter and Lundstrom (2005: 246). This framework presents the role of financial incentive schemes, awareness of GFIS, knowing how to access GFIS, having accessed GFIS, currently supported by GFIS, GIFS' fulfilment of the business objectives and positive influence in using GFIS.

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                                                    ┌──────────────┐
┌──────────────┐        ╭──────────────╮            │  The role of │
│ Knowing how  │ ◄──────│  Awareness   │◄───────────│   Financial  │
│ to Access    │        │   of GFIS    │            │   Incentive  │
│ GFIS         │        ╰──────────────╯            │   Scheme     │
└──────────────┘                                    │   (GFIS)     │
         ╲                 ┌──────────┐             └──────────────┘
          ╲                │  Have    │
           ╲               │ accessed │
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│  supported   │                       ╲──────►│  influence in│
│  by one of   │    ┌──────────────┐           │  using GFIS  │
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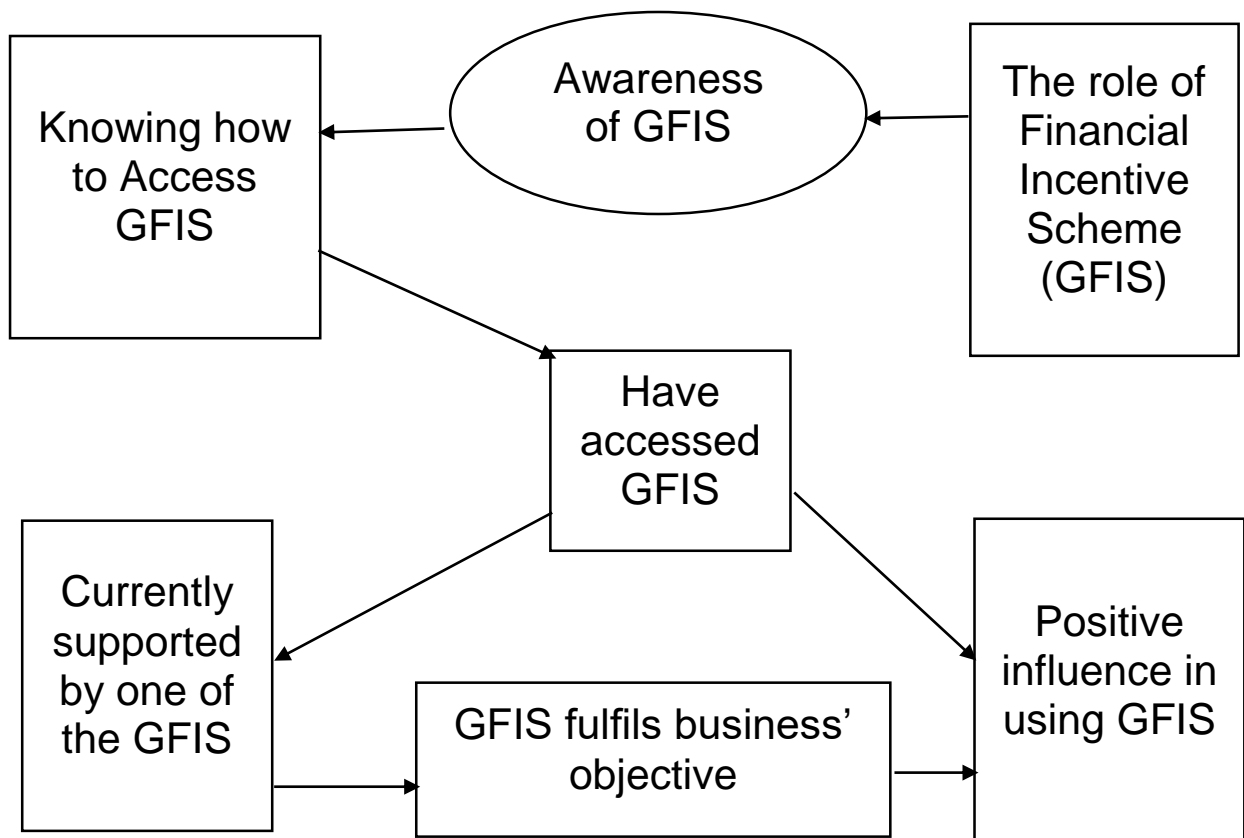
Figure 2.3: Government financial incentive scheme
Source: Boter and Lundstrom (2005: 246)

2.3.1.1 The role of financial incentive schemes

The term financial incentive comprises allowances, soft loans, reliability assurances, economic assistance and manufacturing rates relief offered by government to specific businesses with an aim to make them perform some way (Miroslava 2013: 109). The most common financial incentive is the allowance or grant, which epitomises unrestricted money, and indulgent or subsidised loans, which may be considered as cheap money. Furthermore, investment incentive is described as any quantifiable benefit given to particular enterprises or classifications of enterprises by or at the direction of government. It intends to change the conduct of economic performers or to impact their judgments in order to attain particular results. Lastly, incentives should be 'precise', that is they should be limited to investors who meet specified standards, for instance locating in a precise area or operating in a precise economic sector.

The dti in SA has set up quite a few programmes primed to encourage the development of SME black-owned or empowered businesses (dti 2015). These are included in black empowerment charters and codes, largely separated into three units: human resources empowerment, direct empowerment and indirect empowerment. The dti dedicated itself to produce 100 black manufacturers by 2017, through the founding of its own financial support programmes and changing regulations to impose alterations in expenditure and the giving of permits by government departments and state-owned enterprises (Maoto 2012). Segments that have been recognised as reaching this determined objective consists of clothing industrial, manufacturing chemicals, agro-processing, renewable energy, car industrial, forestry and advanced industrial.

The following financial incentive schemes are offered by the SA government. Textile and clothing industry is also covered in these schemes.

- **The Black Business Supplier Development Programme (BBSDP)**

The government set the aim of enhancing the sustainability of enterprises occupied by black people in order to create employment and reduce inequality. Thus, BBSDP, which is cost-sharing funding offered to small black-owned enterprises to help improve their effectiveness and sustainability, was developed (dti 2013: 3). A maximum funding of R1 000 000 is offered by BBSDP. That is, R800 000 maximum for tools, machinery and equipment and R200 000 maximum to improve their business governance, management, marketing, productivity and use of modern technology.

Enterprises that qualify for this incentive are mainly enterprises occupied by black people with a largely black management team, a turnover of R250 000 to R35 million annually and who have been functioning and trading for at least one year.

Tangri and Southall (2008: 699) discuss the approach of the SA programmes meant for black people. They state that the government has been careless in applying black economic empowerment (BEE), causing a debate around it due to the perception that this programme has mainly benefitted politically-linked entities instead of the majority of the formerly deprived, and because SA's business sector is still dominated by the minority white people.

- **The Manufacturing Investment Programme (MIP)**

The MIP is suitable for the expansion of existing production facilities and upgrade of existing facilities in the clothing and textiles sector, and for local and foreign-owned manufacturers that wish to launch a new production facility (dti 2013: 18). The main objectives of this programme are to encourage investment in manufacturing, increase job opportunities and sustain business growth.

- **The Sector-Specific Assistance Scheme (SSAS)**

The SSAS is a reimbursable cost-sharing fund providing financial assistance to export councils, joint action groups and industry associations (dti 2013: 21). Two sub-programmes, namely Generic Funding and Project Funding for Emerging Exporters (PFEE) are covered under this scheme. Enterprises which are eligible for SSAS are non-profit business organisations that are in sectors prioritised by the dti, regarding generic funding and project funding, given that the goal of the business and or its intended venture seeks to comply with the objectives of Trade and Investment South Africa (TISA), a division of the dti, and the dti's export plan.

The aim of this programme is to develop the industry segment as a whole, grow fresh export markets, encourage creation of employment, widen the export base, recommend answers to factors hindering export development and stimulate the wider involvement of businesses that are owned by black people (dti 2013: 23).

- **The Production Incentive (PI)**

The PI was established as an upgrade fund facility or an interest subsidy facility, or can be a combination of both (dti 2013: 20). It seeks to support enterprises in improving their processes, products and people. Qualified enterprises that can apply for the PI are the clothing and textile manufacturers, cut, make and trim (CMT) operators, footwear manufacturers, leather goods manufacturers and leather processors (particularly for leather goods and footwear sectors).

- **Isivande Women's Fund (IWF)**

In SA, both males and females can be entrepreneurs. However, male entrepreneurs have more access to finance than female entrepreneurs do (Global Partnership for Financial Inclusion 2011: 15), and females also encounter matters of rights and

expression. Such dissimilarities form a bias and frequently cause a condition where females' economic undertakings are less resourced and under-exploited, decreasing the general total production and preventing economic development. This is mainly challenging for female entrepreneurs who want to expand their businesses.

Women in SA are constantly worse off in the industry market across professions (English and Hay 2015: 149). Women mainly appear within the bottommost low-income group that financial bodies do not presently provide for. The gendered outlines of joblessness are broken down as follows:

- ❖ African (Black) women at 31.1 percent against 23.4 percent for Black men;
- ❖ Coloured women 21.3 percent against 17.9 percent for Coloured men;
- ❖ Indian/Asian women 15.7 percent against 10.8 percent for Indian/Asian men; and
- ❖ White women 5.8 percent against 3.6 percent for White men.

The dti (2012: 26) reveals that South African women face stumbling blocks in producing quality products which could easily be sold from local and international retail shops and boutiques, in terms of attracting more buyers. They suggest that women need to be taught relevant skills and expertise to guarantee the quality production of commercially viable products that are produced. They further reveal that women excel when it comes to designing and crafting stylish products for both local and international markets, particularly upholding South African culture and heritage.

The IWF is a special women's grant established by the dti (dti 2013: 27). The grant seeks to facilitate economic empowerment by offering more affordable, usable and receptive finance. IWF targets legally registered enterprises, 60 percent of which are owned and/or managed by women. The businesses must fall within a loan range of R30 000 to R2 million and must have been existing and functioning for two or more years.

Women's lack of access to financial resources reduces their capacity to pursue economic opportunities (Global Partnership for Financial Inclusion 2011: 6). Thus, the government and financial institutions have a part to play in enhancing access to finance for SME women owners. The creation and administration of programmes precisely geared for assisting the development of women entrepreneurs is indispensable (Global Partnership for Financial Inclusion 2011: 46).

2.3.1.2 Awareness of government financial incentive schemes

For SMMEs to utilise the GFIS they need to be aware of the schemes that offer the assistance. Kruger (2011: 207) states that the ANC government introduced the BEE in an attempt to overcome the economic legacy of apartheid and to widen involvement in the economy, particularly by those perceived to have been formerly omitted or denied access. Kruger goes on to say that many black South Africans have not benefited from the BEE programmes because of poor performance in fulfilling its goal.

Rogerson (2010: 772) argues that when it comes to government financial support, not many black SMME owners are assisted, the availability of funds is too little, too many centralised top-down programmes are considered by Small Enterprise Development Agency (seda) and dti, and delivery is perceived to fall far short of early assurances, not to mention expectations. Thus, the target groups for government financial support have not been reached.

South African SMME owners face a stumbling-block of being in need of a more skilled workforce, a reduction of bureaucracy and legislation and a reduction in business tax (Turton and Herrington 2012: 52). According to Rogerson (2010: 768) It is difficult to measure the success of government SMME programmes because the largest numbers of new SMME failures occur because of the failures of the formal economy. Turton and Herrington (2012: 52) argue that government should address the issue of business failure due to lack of entrepreneurial skills more than providing finance nonstop to new businesses. Moreover, government should track the failures of SMMEs in order to comprehend in closer detail the reasons for failure, and thus highlight fitting interventions.

It is significant for governments to think through cautiously how maintainable the incentives are that they offer, particularly the subsidising of the expense of borrowing (Association of Chartered Certified Accountants [ACCA] 2012: 3). The possibility of defaults on such incentives cannot be inferred from the first years of operation, in the course of which inspection tends to be uppermost. Thus, governments have to cautiously address the SMEs' awareness of the schemes since the request for such services is frequently low.

According to Turton and Herrington (2012: 52-53) the following are the constraints regarding government programmes:

- ❖ The lack of access to skills development programmes;
- ❖ A proper platform to match entrepreneurs with services they require does not exist;
- ❖ Slow and inadequate government services to support small businesses;
- ❖ The lack of co-ordination of available efforts and resources;
- ❖ No accountability or measurement within the government's SMME agencies;
- ❖ No long-term plan in place to co-ordinate and measure government and private sector involvement in creating and assisting small business;
- ❖ The lack of access to support such as mentoring, infrastructure, incubators, and computers; and
- ❖ The lack of training for entrepreneurs before start-up.

There is a need for the government to co-ordinate its assistance by simplifying its style of government agencies and departments that assist SMMEs (Timm 2011: 12).

2.3.1.3 Access to government financial incentive schemes

Government support can be there for SMMEs to use, however, the whole procedure of obtaining the assistance is crucial. The International Finance Corporation (2010: 3) reveals that the absence of access to funding is constantly quoted by SMMEs as one of the prime obstacles to development. Furthermore, SMMEs are supplied with insufficient funding services. Lastly, they conclude that with such restricted access to funding, it has been difficult for SMME owners to make the investments they require to increase the output and effectiveness of their businesses, investigate new markets, and employ more persons.

The lack of support services to SMMEs is somewhat the result of a widely revealed 'lack of awareness' by both established and developing SMMEs of the existence of SMME backing incentives (Rogerson 2010: 774). This issue of the awareness and knowledge of dti support programmes is worsened, to a degree, by an uneven geographical dissemination of service suppliers.

Rogerson (2010: 775) argues that lack of support services is not the main issue, but the main issue is the uneven spread of where, how and in which fields services are

offered. Unwieldy administrative processes together with the constant variations in programmes discourage SMMEs from applying for assistance and impose high search costs when they look for such services.

Doug (2008: 14) argues that the low use of government-supplied business support services is because of low levels of awareness multiplied by the misperceptions caused by the number of organisations offering a wide range of programmes. The whole process of obtaining government financial support should be simple, and SMMEs should be assisted from the beginning to the end.

The lack of SMEs access to finance limits their development (BIS 2012: 8). A further limitation is their lack of skills to show themselves as investable prospects to investors.

2.3.1.4 Perceptions of government financial incentive schemes

The SMME economy is perceived as a constructive factor in contributing to poverty alleviation (Rogerson 2010: 771). However, the assumption of this significant role is not a reflection of the achievement or influence of government programmes. Rogerson (2010: 771) further indicates that the policy and support environment provided by local and national governments can be used to assess the influence the SMME economy might make in reducing poverty. Existing national support programmes do not live up to expectations regarding assisting SMMEs, particularly SMMEs owned by women. SME owners should not be discouraged from applying for funding simply because they think they will be excluded (BIS 2012: 11).

The SA government has prioritised SMMEs as an answer to jobs and business creation (Urban and Naidoo 2012: 147). However, Nkanyiso Mngoma, an entrepreneur, (2015) opposes the government's approach in dealing with the issue of high unemployment rate through SMMEs. Mngoma reveals that the government expectations on SMMEs to create more jobs straightaway is impracticable. Furthermore, he suggests that the government's approach should be ensuring that existing SMMEs make a profit until their businesses are stable enough to focus on creating job opportunities, thus reducing the unemployment rate.

Government's purpose should be to create a climate that is conducive and sustainable for SMMEs, where they can operate their businesses efficiently and effectively (Miroslava 2013: 109). Moreover, government should use investments incentives as

an instrument to enhance investment and to arouse economic development and job creation.

The next section discusses the innovative process in SMMEs. The aim of this literature review is to discuss the innovative processes that are practised in SMMEs and the influence they have in enhancing their operational performance.

2.4   Innovation processes in SMMEs

This section presents innovation process and the impact it has on SMMEs. Hao, Ilan and Yu (2011: 131) state that the way businesses construct and maintain a competitive gain is an important subject in the field of planned administration. They further state that the environment where businesses operate is challenging and frequently changes. Thus, businesses need to have resources and ability to readjust in this type of environment.

According to Booyens (2011: 67), SMMEs' innovation rate is comparatively high, with small enterprises recording the top innovation rate. However, he argues that those who create policy have a lack of requisite micro enterprise knowledge to assist in policy-making regarding innovation in SA.

Terziovski (2010: 892) suggests that SMEs should emulate big manufacturing businesses with regard to proper planning and organisation because innovation culture and strategy are closely associated with the innovation process, which enhances the performance of the SMEs. Laforet (2008: 753 - 754) advises that SMEs have to be more inventive so as to develop innovative products to preserve their competitive advantage. She further states that medium businesses have a tendency to be more inventive than large businesses.

Nedelko and Potocan (2013: 36) contend that enhancing the level of innovativeness in a business is highly reliant upon suitable functioning and conduct of management, which must make and uphold suitable settings for innovative functioning and conduct of business altogether and its personnel. They further contend that less innovative businesses lag behind because of slow change from predictable to innovative processes. Thus, SMEs' aim should be to shift from old-style functioning and thinking to be more innovative.

Kariv (2012: 169) suggests that employees should be encouraged to utilise more innovative processes and to accept change on an ongoing basis. He further suggests that change should be presented by the SME owner. Lastly, a business has a good chance of growing when an owner shares power with the employees so they can freely make suggestions or offer innovative ideas.

The following subsections will discuss management innovativeness, innovation processes and their implementation, and innovative capacity.

2.4.1 Management innovativeness

The framework, as presented in Figure 2.4, explains the organisational innovativeness. It is titled 'Management Innovativeness' and will be used to discuss the management innovativeness of SMMEs on their operational performance through the factors that are stated. Nevertheless, not all of the factors within the framework will be discussed, only few of which link to this study. This is because some of the factors were covered in other sub-paragraphs and objective. Moreover, some factors are external, whereas this objective focuses on the innovative processes of the business. The following Figure 2.4 presents the management innovativeness framework.
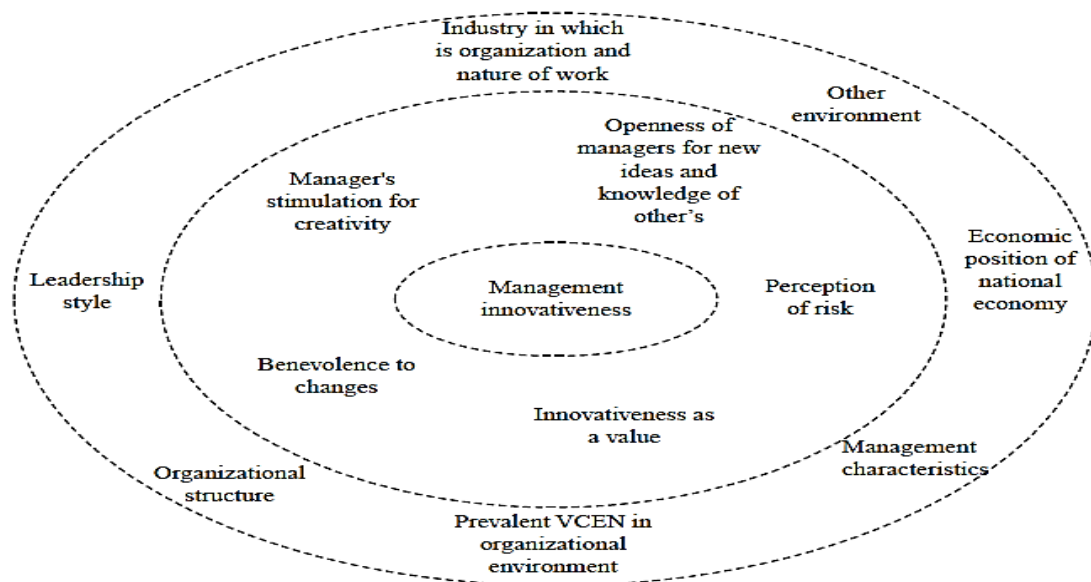
Figure 2.4: Management innovativeness
Source: Nedelko and Potocan (2013: 44)

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2.4.1.1 SMME Owner

Starting a business for the first time is linked with having to innovate as an SME owner (Katz and Green 2013: 7). Furthermore, SME owners are regarded as entrepreneurs. Anybody who operates for himself or herself rather than for others, is an entrepreneur. The SME owner depends not merely on the proper understanding of his or her personnel, but also draws heavily on the communication between manager and employees (Higgins, Mirza and Drozynska 2013: 471).

The following discusses the females and youth's involvement in the business.

- There are a growing number of females in various businesses (Watson and Newby 2005: 131), particularly small businesses in SA. Due to equality legislation and higher educational standards, more and more females find themselves in what used to be a male-dominant areas or occupations. Chingwaru (2014: 10) states that there is a perception that women lag behind men in economic development which is a legacy from history where women were marginalised and branded as permanent minors.

- Young SME owners do not essentially develop, persist or deliver maintainable revenues (Green 2013: 9). According to the dti (2014: 4), youth (those aged 14 to 35 years) constitute 41,2 percent of the South African population. However, the amount of young people that are involved in entrepreneurial activities remains low at 6 percent of the entire youth population.

2.4.1.2 Openness of managers to new ideas

Innovativeness in the business allows managers to manage resources and helps them to pay more focus on the requirements of new ideas and activities (Wided 2012: 134). If innovation is to add value to the business, managers first have to comprehend the principles of innovation along with developing the approach, attitude and knowledge of where, when and how innovation will emerge so as to find new solutions (Reckhenrich, Kupp and Anderson 2009: 69). Thus, this should be a motivation for managers to be open to new ideas.

It is important that managers engage the staff in discovering new ideas that will bring innovative processes to enhance the operational performance of the business (Alfes,

Truss, Soane, Rees and Gatenby 2010: 2). Moreover, employees should be involved in the implementation of the outcome of the innovation process.

2.4.1.3 Having time to innovate

Innovations requires massive investment of management time and money (Pisano 2015). However, it remains a vital initiative, even though it can be frustrating at times. A vital aspect of innovation is allowing a flexible time where everyone involved can be innovative (Markstrom 2016: 4). Moreover, managers should give employees the freedom to innovate without being worried with how they do it. They should let them know results are expected from this innovation. This approach could make employees enjoy their job and become more efficient through creating the foundation of a cycle involving more and more innovation (Perlow 2014: 24).

Another important aspect for managers is to develop an innovative culture in the business environment (Kalb 2013). They can do this by making sure that all employees know that innovation is a job requirement and ensuring there is time available for innovation practises. Managers should go with bravery in accepting innovative concepts and the time needed for their implementation, and this should be part of the businesses' objectives (Cristina 2003: 705).

2.4.1.4 Manager's stimulation for creativity

Small businesses have a daily challenge to be, and remain, competitive. Innovation is one of the key tools to achieve this goal (Mainemelis 2010: 560). It is necessary for them to continually develop creative concepts to make new products and processes if they intend to survive in the business environment (Robinson and Stubberud 2015: 140). Innovation comes from creative thinking which later formulates into a new product or process. Moreover, SMEs that are innovative allow their employees to develop new and creative ideas. It is possible that some businesses often ignore innovation as a crucial tool to success, however that is a small number compared to those who are innovative.

There is no assurance that a novel invention will be effective or that it will be welcomed by the work setting since the creative process is unclear and risky (Mainemelis 2010: 561). Cristina (2003: 705) suggests that managers should inspire their employees with

the intention of achieving their goals, thus allowing for creativeness in the working environment.

2.4.1.5 Work environment

The workplace is one with people of several ages working together to accomplish objectives collectively (Otto, Wahl, Lefort and Frei 2012: 154). Personnel with physical and mental freedom are effective in making decisions, taking risks, and making change in a business leading to healthy progress and robust results (Huddleston 2014: 50). These personnel use the mission, vision, and values of the business to take decisions.

Rothe, Lindholm, Hyvonen and Nenone (2012: 79) suggest that the personal necessities and preferences of the workers should be taken into consideration in the work environment design. Workers ought to be given more control over their working setting since employee fulfilment, output and happiness is influenced by the physical office setting (Rasila 2012: 96).

According to Huddleston (2014: 51), a vigorous work environment comprises physical, psychological, and environmental dimensions. He defines diverse dimensions of a vigorous work environment. Firstly, individuals are appreciated and treated courteously and justly. Secondly, in a vigorous and effective work environment, there is a robust wisdom of trust among all workers from the top position to the bottom position within the business. The business allows workers to be included when it comes to making decisions and taking risks. Thirdly, the structural principles within a vigorous work environment support communication and teamwork. The business identifies people as assets and does not make decisions merely based on finances. The business also considers its mission, vision, and values on decisions-making. Fourthly, a vigorous and effective work environment should make employees feel safe. Finally, a sense of closeness is obvious in a vigorous work environment. A vigorous work environment is essential to a businesses' achievement.

Frauenheim (2015: 35) argues that when employees experience proper guidance from a manager, trust is built. This can take place through encouraging collaborative communication, signifying competency, upholding a robust vision, matching actions to words and treating workers with admiration and equality.

2.4.1.6 The importance of employee involvement in the business

Employees appreciate working in surroundings where they have faith in individuals they work for, have self-importance in what they do and appreciate the individuals they work with (Mishra, Boynton and Mishra 2014: 183-184). Such optimistic work environments are normally branded by open communication. A cognizant and envisioned effort by persons at upper level in a business to offer noticeable extra-role or role-expanding prospects for persons at a lesser level in the business to have a better voice in one or more parts of structural performance can be classified as employee involvement (Phipps, Prieto and Ndinguri 2013: 110).

Employee involvement is backed by structural guidance which must be planned and developed with the involvement of all employees (Mellat-Parast 2013: 2809). Distributing the power of making decisions to employees can lead to enhanced performance, work gratification and a constructive impact on the employees' welfare and psychological health, intrinsic motivation and self-confidence (Stefanovska-Petkovska, Bojadziev and Mucunski 2015: 75). Andries and Czarnitzki (2014: 21) argue that SMMEs tend to rely mainly on the owner's personal understanding for evolving innovations. However, a number of businesses are currently trying to move from the old tradition of authoritarian organisational style to an inclusive and participative manner of functioning (Irawanto 2015: 159). This includes allowing employees to add their inputs and involving them in the process of taking decisions.

2.4.1.7 The role of rewards in the business

A manager that is motivated and provides incentives for creativity in the workplace enhances employee's willingness to work and improve innovation processes to boost operational performance, according to Chomal and Baruah 2014: 53. They state that performance related reward may vary in the same business based on the different classes of workers. Presslee, Vance and Webb (2013: 1806) add that giving rewards for objective achievement can increase effort and reinforce employee's objective commitment, which can lead to improved performance. Performance-based rewards have customarily taken the form of cash bonuses but businesses are increasingly giving tangible rewards. This includes gift cards, merchandise, and travel.

Rewards in a business indicate all the benefits, financial and non-financial, that a worker gets through his or her work connection with a business (Newman and Sheikh 2012: 72). According to Stumpt, Tymon, Favorito and Smith (2013: 21) workers are inspired by both extrinsic rewards (for instance, wage, promotions) and intrinsic rewards (for instance, performing work that is meaningful). The two mentioned types of rewards influence results for instance, commitment to the job, organisational fulfilment, and motivation to stay in the business. Assigning rewards in a methodical way is important to guarantee that personnel recognise salary decisions as just and reasonable (Day, Holladay, Johnson and Barron 2014: 74).

2.4.1.8 Benevolence to changes

Every single person has the aptitude to learn and it is via this that a person familiarises him or herself with change and development in his or her surroundings (Wided 2012: 135). Moreover, identifying faults and rectifying them guides, rationally, to change, since it is a type of change moving from an unsatisfactory phase to an improved one. Organisational learning happens when there is a will to resolve a communal issue that has arisen.

Poon (2013: 396) states that managers have a significant effect on employee attitudes and conduct. Thus, relational trust is an important element to keep employees motivated in the workplace. This brings a productive environment to work in, where there is readiness to assist workmates, awareness of workgroup cohesion, and improves numerous aspects of job performance such task performance, background performance, and workplace nonconformity.

2.4.1.9 Testing of innovative process

Employees are mindful of the significance of innovative processes (Likar, Macur and Trunk-Sirca 2006: 1071). However, the level of their participation depends on their understanding, know-how and inspiration along with the objectives of the business. To be effective, managers need to be more inquisitive and to search for flaws before trying to bring change or improvement (How to stimulate and cash in on creativity 1997: 205). This will help in reducing the risks that might occur every time an improvement is implemented without looking for the weaknesses first.

2.4.1.10   Perception of risk-taking

Risk-taking is the readiness to take action based on the awareness of potential forthcoming advantages or disadvantages, according to Gartner and Liao (2012: 703-704). They are main features of the businessperson (Ten top tips for SME success 2014: 15). Furthermore, risks can be an opportunity for owners to make decisions that benefit the business (Blunden and Thirlwell 2013: 7). Gilmore, Carson and O'Donnell (2004: 349) argue that the high failure rates of small businesses are caused by a strong link between small business owner-managers and risk. However, Miles (2014: 21) retorts by stating that entrepreneurship is identical with risk, and most, if not all, businesses are risky. According to Fraser, Simkins, and Narvaez (2015: 2) innovative technologies and quicker rates of change have an influence in increased business risk.

According to Kreiser, Marino, Dickson and Weaver (2010: 961) initial descriptions of entrepreneurship focused on the readiness of entrepreneurs to participate in premeditated business-connected risks. They further state that all philosophers acknowledge that entrepreneurship includes taking risks of a certain kind. Acar and Goc (2011: 841) argue that taking risks in SMMEs is not merely based on the rational assessments of the probability and greatness of risks, but also depends on the individual behaviour of the owner, who is the main decision taker in the business.

2.4.1.11   Leadership style

A good match between leadership style and employees' willingness results in a higher level of employee gratification and performance (Chen and Silverthorne 2005: 283). Moreover, owners who have good leadership skills increase the chances of employee-satisfaction in the business. Thus, once employees develop a willingness to participate in a process, encouraged by the owners' leadership style, this results in higher job satisfaction and performance where thoughts of leaving the business are slim.

2.4.2 Innovation processes and their implementation

Innovation in the industrial segment usually puts emphasis on process enhancements, for which proper arrangements and structures are essential to squeeze expenses out (Terziovski 2010: 893). Big manufacturing companies have largely prospered with this approach of concentrating on process enhancement. The good side of the innovation

process is that it allows business to have competitive edge over their competitors by offering exclusive products or services (Szczepankska-Woszczyna 2014: 222). Moreover, there is a good chance of achieving the goal of the business when all staff participate.

The framework in Figure 2.5 demonstrates the innovation process and its implementation. It comprises two phases: the phase of innovation improvement, and the distribution phase. The phases comprise picking one of the ideas, drawing a conclusion on how to apply it, and allowing the introduction of innovations. Only three factors that are related to the study will be discussed.
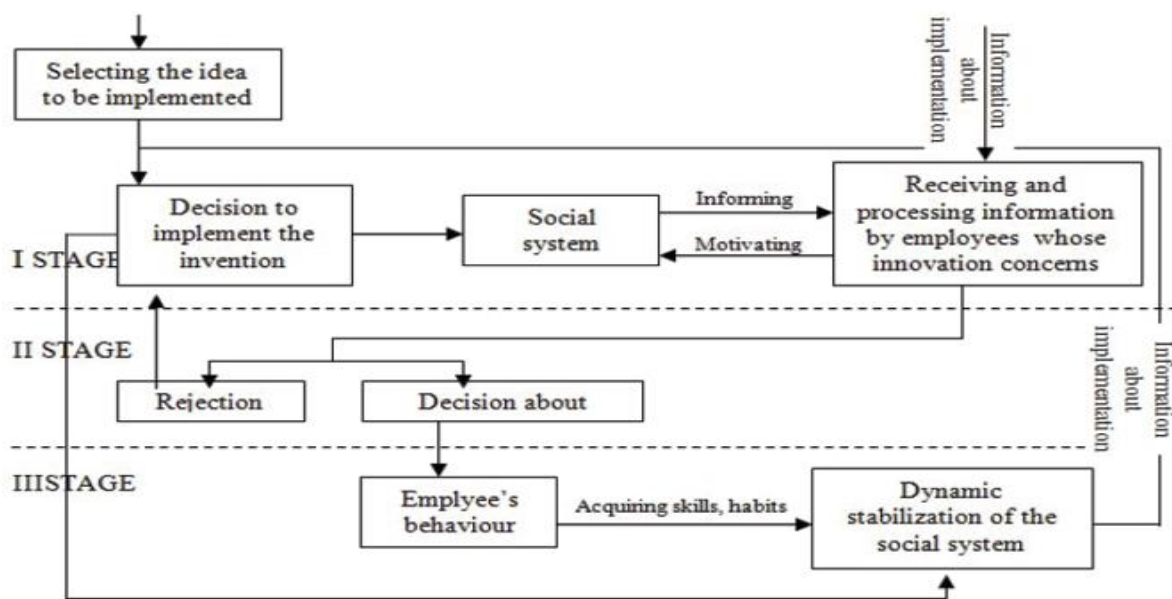
Figure 2.5: The innovative process and its implementation
Source: Szczepankska-Woszczyna (2014: 222)

These variables will be discussed in the following subsections.

2.4.2.1 Selecting and implementing the invention of an idea

Managers can contribute to employee inventiveness in numerous methods for them to be able to select a fitting idea to implement (Carmeli, Reiter-Palmon and Ziv 2010: 251). For instance, they can be mentors for innovative conducts, offer resources consisting of time, funding, and information needed for the imaginative undertaking. They can refresh and rejuvenate their employees to be extra innovative, back

innovative conduct by offering interpersonal assistance to employees, and impact employee inventiveness by shaping the environment of the team or business.

2.4.2.2 Informing and motivating employees in the business

Communication between management and employee is significant for creating a tradition of clearness between the two (Mishra *et al.* 2014: 183). Moreover, ethical businesses look after their personnel, functioning to construct trust via encouraging communication efforts, along with showing respect for employees and acting with honesty in all employee dealings.

According to Hitka and Balazova (2015: 114) motivation is one of the vital basics of human resource management. Furthermore, lack of a suitable level of inspired conduct and activity makes it difficult to determine objectives. Thus, motivation is utilised to inspire individuals to complete the allocated work with genuineness, devotion, and eagerness, and it is the boost which offers extra vigour to overcome the exhaustion, disinterest and desire to quit the work. Managers can play a huge role in employees' personal goals achievement through employee motivation (Hauser 2014: 240).

According to Carmeli *et al.* (2010: 251) managers should motivate their employees to participate in innovative performance by setting the expectation of innovative performance, increasing intrinsic motivation and nurturing dynamism to participate in the innovation task. Because inventiveness can be time consuming and involve effort, motivation plays a significant role in inventive creation.

2.4.2.3 Rejection and corrective actions

Rejection is the act of snubbing of a suggestion, concept or action (Finkel and Baumeister 2009: 23). When employees lack understanding of a process and feel threatened by the improvement that is taking place in the business, unless they are adequately informed they can easily reject the process. Corrective action is an action to remove things that are not in line with the objectives and the elimination of detrimental elements (Tartal 2013: 6). Employees should be clear as to what is expected from them. Managers should communicate with them and make them understand the role they have to play in the innovation process. Any innovation concerns should be addressed and corrected.

Products that are innovated through current technology pose a serious threat to non-innovators (Woodside and Biemans 2005: 380). This is because there is a good chance that such products become a hit in the market. However, when they do not become a success it means going back to the drawing board to either reject or correct the product. According to Kruger, Ramphal and Maritz (2013: 71) that is a long process and could be costly to the business. Thus, they introduced six steps that can be considered when designing a product. These include:

1) Planning stage – development of a design strategy and an investigation of practical and technological requirements.
2) Concept development stage – reviewing of the target market and their needs. Acceptance and rejection of the idea is possible.
3) System design stage – redesigning of systems to allow for the new process.
4) Detailed design stage – capturing the specifications of the goods and services.
5) Testing and improvement stage – producing samples for test and making corrections or even rejecting the product before it is signed off.
6) Production initialisation stage – starting the actual production and training the employees in the process required to create the new goods so they can easily accept process.

In the fifth step the business can produce samples for a test before they send them into the market (Kruger, Ramphal and Maritz 2013: 71). If they come across any problem, in the process or design, they can correct it. They can also reject the process and review the concept itself.

2.4.3 Innovative capacity

The capacity for innovation has a crucial part in shaping who prospers in the world of business (Natario, Couto, Tiago and Braga 2011: 67). The idea of innovative capacity assesses the rate of invention. The framework in Figure 2.6 presents the determinants of innovative capacity.
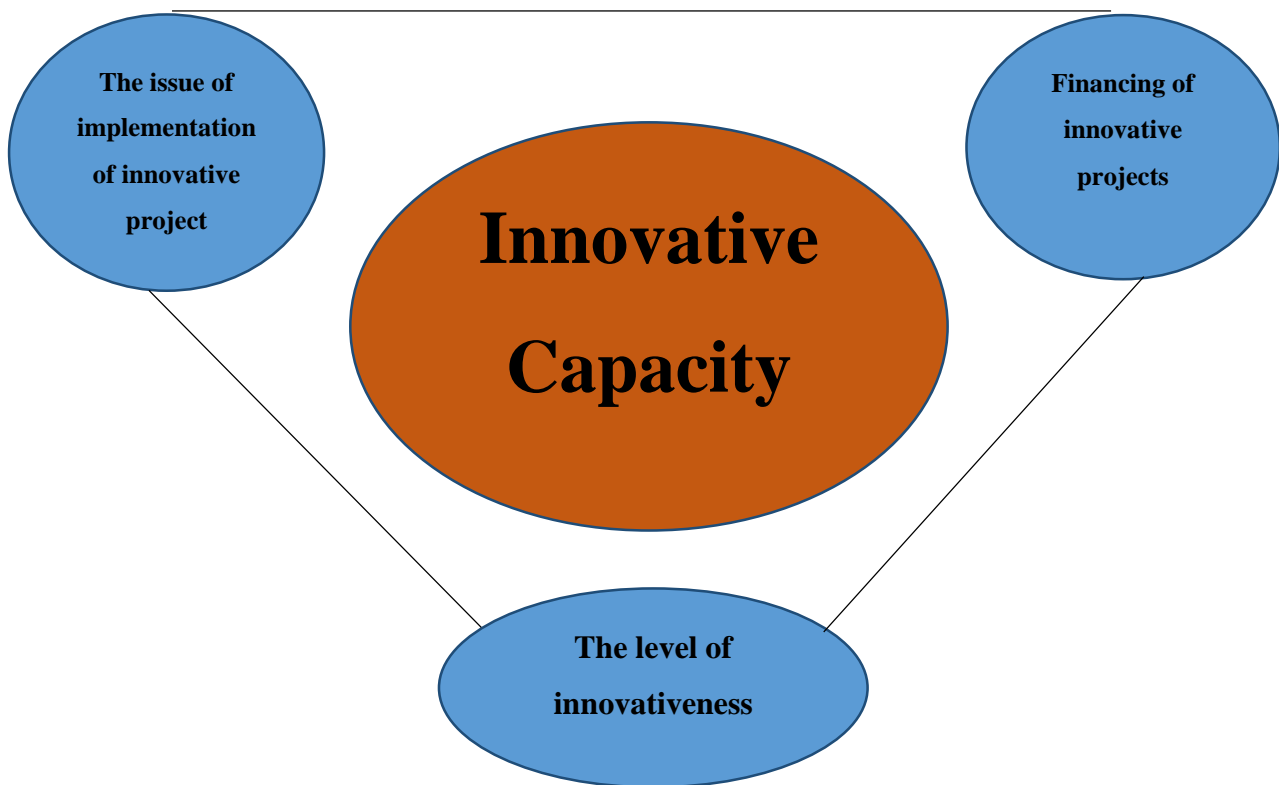
Figure 2.6: Determinant of innovative capacity
(Natario, Couto, Tiago and Braga 2011: 72)

2.4.3.1 The issue of implementation of innovative projects

Complete economic and financial policies, structural policies that affect the business environment, including tax, infrastructure, regulation and labour markets, and an uncomplicated regulatory environment are crucial to endorsing entrepreneurial activity and enhancing innovative practices (EDGE 2013: 37).

Operating with poor forecasting and planning systems and operating with long cycle periods have become a habit for many SMEs (Singh, Garg and Deshmukh 2008: 531). Moreover, SMEs experience issues with undependable inventory control systems, with no stock tracing and poor cost control. This can result in surplus out-dated stock and corroding of customer service levels (Gunasekaran, Patel and Tirtiroglu 2000: 71). Furthermore, even though studies thus far have revealed that SMEs are more flexible, more compliant to alteration and more open to fresh concepts and methods, they do nonetheless encounter restrictions in acquiring and applying new systems because of

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absence of human and monetary resources (Metaxiotis 2009: 53). All of these then affect the execution of innovative project.

Becker, Quinn, Rappaport and Sims (1994: 1-2) presented the following findings which affect the implementation of innovative projects:

❖ The unavailability of a leader who is supposed to be working closely with the staff ensuring satisfaction and acceptance of the innovative process;

❖ The hesitance of sharing information with the rest of the staff;

❖ The lack of organisational challenge that inspires business to implement innovative processes;

❖ The inappropriateness of operator participation, where a workplace approach does not meet employees' requests and necessities, or where they lack understanding the nature of the innovative project to be executed;

❖ The lack of understanding concerning the kind of the work employees are doing, why they are doing what they do and the specific manner in which they do it;

❖ The low level of employee gratification and productivity; and

❖ Costly and time consuming.

2.4.3.2 Financing of innovative projects

Access to finance is a fundamental element for growth and development of SMMEs (Vasilescu 2014: 35). Thus, the absence of finance can limit cash flow and affect businesses' existence forecasts. Vasilescu (2014: 35) further argues that funding innovative SMMEs might be extremely dangerous and indeterminate, making it challenging to come up with a jointly amenable funding agreement. The absence of understanding financial control along with ambiguity of the business environment normally results in SMMEs encountering serious difficulties concerning financial and total performances, which can even threaten the existence of the business (Karadag 2015: 26). Furthermore, financial control is the core of the whole controlling process in a small business.

Small businesses are characteristically controlled and run by one or more family members, where the human, physical and financial capital of the business and family are frequently combined (Haynes *et al.* 2009: 297). A number of SMMEs in townships in SA find it difficult to get capital and assured earnings (Mbonyane and Ladzani 2011:

553). Thus, they experience poor credit records, which result in poor cash flow. Oriaku (2012: 19) argues that small businesses have thus far not encompassed the necessity to completely assimilate financial arrangement and capital arrangement with operational arrangement into their daily businesses. Thus, finances for innovative projects are not a priority and so they become isolated which results in lack of inventiveness.

2.4.3.3 The level of innovativeness

Nedelko and Potocan (2013: 38-39) reveal the following key stumbling blocks to increasing the level of innovativeness in less innovative SMMEs:

- ❖ Old-fashioned values/culture/ethics/norms of business members, and particularly those of management;
- ❖ Absence of innovative culture;
- ❖ Negative attitudes towards risk and reluctance to take risk;
- ❖ One-sided comprehension of innovativeness;
- ❖ Immature service sector and public administration;
- ❖ Little efficacy of investments in research and development; and
- ❖ Weak cooperation between private/public sector businesses and research institutions.

Innovative process applications such as JIT and electronic data interchange (EDI) are as predominant in the present business environment as computer-aided manufacturing (CAM), computer-aided design (CAD) and computer-aided training (CAT), and may be similarly or more significant in improving the level of operational performance (Wagner, Turner and Byrd 2001: 2010).

SMEs are selecting numerous progressive computer-integrated manufacturing packages (Marri and Gunasekaran 2003: 152). The main aim of computer-integrated manufacturing (CIM) is to provide computer backing, control and high levels of cohesive mechanisation at all levels of manufacturing (and other) businesses by connecting keys of mechanisation into a distributed processing system (Chan, Jiang and Tang 2000: 73). In their study, Kock, Danesh and Komiak (2008: 72) found that several SMEs stated how crucial it was that personnel are capable of using a computer and related software (for instance Microsoft Word).

Having discussed the innovative processes, the following section discusses the extent of physical environment. The aim of this literature review is to discuss the physical environment of SMMEs in which they operate their business, and to discuss its influence in enhancing their operational performance.

2.5 The extent of physical environment

Persons require helpful and accommodative environment to continue with the responsibilities of life and work. Physical environment in this study refers to the touchable and physical setting which can interfere with people and their activities such as social interaction in different ways. According to Oksanen and Stahle (2013: 816) utilising the choice of place and space, creative processes may be facilitated. They further state that a perfect operational environment inspires and allows productive dealings between diverse actors.

Okpara and Kabongo (2009: 8) argue that numerous SMEs in African countries function in an unfavourable policy and regulatory setting, have complications in accessing credit, and have inadequate markets for their products. They further reveal that SMEs utilise old-fashioned technology, have absence of sufficient working places, and lack appropriate training facilities that are intended to meet their exact requirements. In a business environment typified by instability, complications and deep societal cleavages, the business managers' perception of risk and indecision will be increased (Van Wyk, Cabaret and Michael 2004: 262).

Some businesses appear to be able to swiftly improve and execute innovative responses to threats and opportunities that occur in their environment (Bititci 2011: 852). By contrast, other businesses appear to lack this even when they perceive and identify the same threats and opportunities. Businesses with well developed, established processes that allow horizon scanning, monitoring, control, as well as constant enhancement and evolution are more likely to outdo their rivals and sustain their performance (Harmon 2010: 55).

Small businesses in Brazil and United States of America are finding it challenging to function effectively due to formalities in obtaining finance because of tough rules, policies and regulations, and cumbersome administration (Oriaku 2012: 20). Of the 144 competitive countries surveyed, SA is the 56th most competitive country, behind

Mauritius (39th) which is ranked 1st in Africa (World Economic Forum 2014: 38-39). SA does well on measures of the quality of its institutions (36th), including intellectual property protection (22nd), property rights (20th), and in the proficiency of the legal framework in challenging and resolving dissimilarities (9th and 15th, respectively).

Small businesses are driven by investment and likely economic returns and look largely at economic reasons for locating in an area (Van Eeden 2013: 136). Most small businesses operate in urban areas because of the advantages it has such as the infrastructure and quick services. In addition, in eThekwini, stakeholders are taking advantage of the economic benefits of locating in the Urban Development Zone and numerous upgrades are occurring in the eThekwini CBD.

Having introduced the extent of physical environment, the following sub sections discusses the infrastructure which includes, information communication technologies (ICT), internet, roads and electricity.

2.5.1 Infrastructure

Infrastructure such as roads, water, sufficient power, sewerage and telecommunication services, has a major impact on SMMEs (Mbonyane and Ladzani 2011: 553). Lack of infrastructure interrupts the development visions of SMMEs (Fumo and Jabbour 2011: 852). The biggest impact is in countries that are less developed and developing, as several of these countries suffer from an absence of simple infrastructure such as transport, telecommunications and electricity.

Brazil, India and SA have comparable levels of infrastructure development (Timm 2011: 15). According to the World Bank survey (as reported in Timm 2011: 4) SA is ranked 43rd of countries as a good location to start up a business.

Poor infrastructure such as bad roads, insufficient water provision and unpredictable electricity supply hinders SMME development (Ejembi and Ogiji 2007: 7; Mbonyane and Ladzani 2011: 553). Absence of ICT can reduce customer satisfaction and restrict development in SMMEs (Chong 2008: 469). Bowen, Morara and Mureithi (2009: 16) add that infrastructure, as it relates to the provision of access to roads, sufficient power, water, sewerage and telecommunication services, poses a critical test for SMMEs.

Purcarea, Espinosa and Apetrei (2013: 1098) suggest that there is a need for infrastructure that can back the formation and maintenance of knowledge sources and a setting that allows the cultivation and facilitation of knowledge sharing and organisational learning. Moreover, a more globalised infrastructure geared to the smooth growth of businesses across borders will help the development of global SMEs. This includes the infrastructure for financial markets, consultative services, information access, telecommunications, intellectual property rights, markets and regulation, dispute resolution processes, etc. all of which require to be globalised. In addition, governments are vigorously assisting businesses that have the technology infrastructure (Jutla, Bodorik and Dhaliwal 2002: 146).

2.5.1.1 Internet for record keeping

The internet has become a daily necessity for many businesses (Tseng and Johnsen 2011: 572). It is easy to use and can assist in completing a number of tasks. Many material goods as well as services are obtainable by means of the internet in this era of innovation of technologies. It has become an important instrument for promoting businesses and their products or services (Complete Network Solution 2014). Moreover, businesses can present themselves to customers with the use of a website, and through the internet customers are able to know about the current promotions of the business. Internet could benefit SMEs in different ways, including providing them with the ability to know and evaluate competitors and develop relationships in overseas markets (Tseng and Johnsen 2011: 572).

The internet has been described as a worldwide information system linking computers or networks and facilitates various forms of communication for instance e-commerce, World Wide Web (www), e-mail, online video sessions and voice sessions (Tseng and Johnsen 2011: 573). A range of geographical information systems are obtainable. The most well-known are electronic maps offered by internet search services, such as Google, Yahoo!, Bing, etc. (Ghita 2014: 101). Their purpose is to discover locations, addresses, and offer information for direction-finding from point A to point B.

Computers today reflect a need in nearly every business that functions in the "age of discontinuity" (Mihajlovic and Drazeta 2014: 288). The developments of computer and communication technology carry an enormous extent of information and knowledge, (Ghita 2014: 102). Furthermore, the nature of the internet where each network unit

(that is, business) can fix its own guidelines and utilise a lot of diverse applications to aid each component of the business procedure appears to be the perfect medium for supporting structural change. According to Stevens, Loudon and Cole (2002: 75) small businesses use the internet to get general information, order products and supplies, attain dealer information, client information, and rival information.

When it comes to internet infiltration SA is lagging behind in Africa with 49 percent compared to Kenya's 63.6 percent, Morocco's 60.6 percent, Mauritius' 60 percent, Egypt's 54.6 percent, Seychelles' 54.3 percent and Nigeria's 51.1 percent (Internet World Stats 2015). On 31 December 2000 South Africa was the only country that had over a million internet users in Africa. However, by 30 June 2015 South Africa slipped into fourth place in the Africa Top 10 Internet Countries behind Nigeria, Egypt and Kenya.

Internet expansions are crucial for SMEs to construct effective dealings with business clients (Tseng and Johnsen 2011: 573). Moreover, knowledge-intensive businesses are early adopters of new technologies in contrast to old-style businesses. Overall, SMEs have positive approaches concerning internet utilisation as a way of improving their image and being a significant instrument for conducting business electronically (Kula and Tatoglu 2003: 324).

2.5.1.2 Roads for transportation of goods

The cost of transporting the goods of a business always escalates (Kruger and Ramphal 2009: 160). Roads are vital to a business to competently run its business (Cornish and Mugova 2014: 135). Furthermore, good transport infrastructure decreases the cost of production and increases a country's attraction as an investment target for both national and international investors.

According to Adisa, Abdulraheema and Mordi (2014: 9) poor road infrastructure is a main obstacle hampering the progress of small business in Nigeria. The poor road conditions cause delivery of goods and services to be difficult in certain parts of the city. This consistently increases transportation expenses and causes difficulty in the operation of small businesses. Moreover, customers find it problematic to reach particular places because of bad roads and choose to purchase goods that are

obtainable along the road instead of an area set aside for small business owners, but with unreachable roads.

2.5.1.3 Electricity for business operations

Manufacturing businesses need sufficient business support facilities in order to function ideally and to impact the financial growth of nations (Mbonyane and Ladzani 2011: 553), simply because they are the economic backbone of most of the countries. Moreover, their ideal processes rely on the quality of business support facilities for instance electricity, water, and telecommunication and so on. In addition, the quality of electricity services is as significant as their ease of use.

Groepe (2015: 3) argues that the electricity industry in SA experienced a reduction of volume as the need for conservation interrupted supply, causing several cases of load-shedding. This in turn caused a decline in manufacturing productivity, worsening the influence of previously slow national and worldwide demand. According to MarketLine (2015: 7), the SA electricity retailing market is anticipated to make total takings of approximately R372.64bn in 2014, signifying a complex annual growth rate (CAGR) of 14.9 percent between 2010 and 2014. In contrast, the Egyptian and Nigerian markets will grow with CAGRs of 18.9 percent and 25.2 percent in that order, over the similar term, to reach relevant values of approximately R150.49bn and R45.86bn in 2014 respectively.

Energy is an indispensable part of community, business, finances, and maintainable growth of any country (Olufemi 2015: 54).

2.5.1.4 Information and communication technologies (ICTs)

Information and communication technologies are technologies that offer access to information via telecommunications (Yu-ting 2014: 5). This comprises the internet, wireless networks, cell phones, and other communication mediums. Information and communication technologies are drastically altering the competitiveness of businesses (Berghout 2012: 18). Furthermore, electronic commerce has come to be primary for numerous businesses within the framework of ICTs, as managers perceive it to be a method to break particular restrictions of the old-style distribution channels. The embracing of ICTs by businesses necessitates a business environment stirring open

rivalry, trust and security, interoperability and standardisation and the obtainability of finance for ICTs (Ashrafi and Murtaza 2008: 125).

Nowadays businesses of all kinds are using ICTs throughout the world, not merely for lowering expenses and enhancing efficacy, but also for offering improved customer service (Ashrafi and Murtaza 2008: 125). In consequence, in order to offer improved services to their citizens, governments have also embraced ICTs. Mbonyane and Ladzani (2011: 553) argue that the absence of ICTs can reduce satisfaction of customers and limit development in small businesses.

SMEs are able to compete and develop in the present corporate setting through the execution of ICTs (Berghout 2012: 20). Furthermore, SMEs that have restricted opportunities and assets when looking to contest alongside the large cosmopolitan businesses may discover an approach to overcome the obstacles experienced by their small size via the numerous advantages that electronic commerce provides.

Having discussed the extent of physical environment, the following section concludes this chapter.

2.6 Conclusion

This chapter discussed the aim of the literature review and its influence on the objectives of the study. It covered operational performance of businesses as well as the South African government policy toward SMMEs, awareness of government financial incentive schemes and access to government financial incentive schemes. Thereafter, it discussed the innovative process, innovation processes and their implementation and innovative capacity. Lastly, it discussed the extent of physical environment of SMMEs.

The following chapter will present the key features that directed the approach of the study, design and methods which were utilised in this study.

CHAPTER 3 : RESEARCH METHODOLOGY

3.1 Introduction

In the previous chapter, the literature review, which is the main basis of information to present a theoretical framework on areas of the study, was discussed. The literature review discussed the theories that are in-line with the stated objectives. These include the awareness of government financial incentives, innovation processes, and the extent of physical environment. However, it firstly discussed the theory on operational performance of the business. This chapter will present the key features that directed the approach of the study and the design.

Research methodology is defined as an organised approach to solve a problem (Rajasekar *et al.* 2013: 5). Moreover, it is a science of studying how research is to be carried out and the process by which researchers carry out their work of defining, clarifying and forecasting occurrences.

This chapter presents a number of sections. These include research method and design appropriateness, the research site, research design, recruitment process and data collection method, data analysis, and confidentiality and anonymity. In addition, the researcher intended to obtain responses from SMMEs. However, only SMEs were the actual participants.

3.2 Research method and design appropriateness

This section focuses on the research method and design appropriateness. According to Rajasekar *et al.* (2013: 5) research methods are the numerous processes, arrangements and procedures utilised in research. The research method and design appropriateness in this section covers the research design approach, planning and framing of the research problem and method to avoid bias in the study.

3.2.1 Research design approach

This study used a quantitative design. Wagner, Kawulich and Garner (2012: 8) state that a quantitative design is the statistical demonstration and manipulation of interpretations for the intention of describing and explaining the occurrences that those

interpretations reveal. This design concentrates on collecting numerical information and analysing the results to draw a conclusion. Thus, the researcher gathered and manipulated raw data through a structured questionnaire. This research design allowed a great number of SME owners in the textile and clothing industry within the eThekwini district to be participants in this study. The study was both descriptive and conclusive in nature.

A descriptive design is used to create or experiment with middle-range concepts by giving responses to questions about the characteristics of theories (Fawcett and Garity 2009: 102). This type of design allowed the researcher to collect much information needed instead of making guesses. The descriptive design allows the researcher to detect data entry errors, to describe and report the data, and to determine the suitability of the data for possible future statistical testing (David and Sutton 2004: 269). A conclusive design is an organised information gathering method that delivers thorough accurate information that is convenient in decision-making (Elahi and Dehdashti 2011: 3). Therefore, this design provided information for the evaluation of alternative courses of action. Lastly, the study executed a case control since the researcher focused only on the SME owners who had information pertaining to the research questions. According to Paneth, Susser and Susser (2002: 360) case control studies focus on individuals who have specific characteristics of the population.

3.2.2 Planning and framing of the research problems

The research proposal took six months to complete for approval, four months of which was engagement with certain agencies in order to obtain their databases of SMMEs. The researcher approached the Durban offices of seda, the dti, and the National Youth Development Agency (NYDA), as well as Statistics South Africa and the eThekwini Business Unit.

The total number of SMEs in the textile and clothing industry in the eThekwini district was 94. The researcher employed a census study, meaning approaching the entire population. The research proposal was submitted to the Faculty Research Committee (FRC) in the Management Sciences of DUT and approved.

3.2.3 Steps taken to avoid bias in the study

The following steps were taken to avoid the bias in the study.

- **The objectives of the study**: these addressed three different factors influencing the operational performance of SMEs, rather than just focusing on one.
- **The SME owners**: they were chosen as participants in the study since they are the most knowledgeable about their businesses.
- **Question bias**: the objectives, research questions, study aim and literature review influenced the arrangements of the statements and questions in the questionnaire. The statements and questions in the questionnaire were prepared in simple and clear language so that the participants could understand. Some terms in the statements were defined so that it was clear what they meant.
- **Subjectivity bias**: the researcher was neutral whilst collecting data. This avoided interpretations of the study before even recording the data.

3.3 Research site

The participants in this study were SMEs in the textile and clothing industry of eThekwini district. There are a number of SMEs in the eThekwini district and it was convenient for the researcher to conduct research within this district. The owners of SMEs are in-charge of their enterprises. Therefore, it was necessary for the researcher to obtain data from the owners as this enhanced the quality of information gathered.

The majority of SMEs were based in central eThekwini district (80%), with the rest being based in the west side of the district.

3.4 Research design

Research is an exploration of discovering answers to scientific and social complications via objective and methodical analysis (Rajasekar *et al.* 2013: 2). It develops the basis of the whole research work, and once the research design is finalised, the authentic work can be commenced. In the following subsections, the researcher explains the target population, census study and the measurement instrument used in this study.

3.4.1 Target population

The target population is defined as a group or persons on whom the survey is based (Kitchenham and Pfleeger 2002: 17). The 94 SME owners within the textile and clothing industry in the eThekwini district were the target population of this study.

3.4.1.1 Response rate

The total number of responses was 80 SMEs out of 94 SMEs. Figure 3.1 provides the breakdown percentages of SMEs that participated in the study.
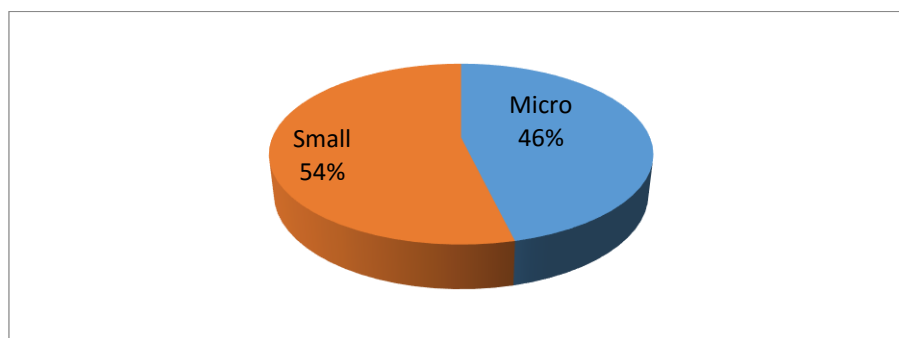
Figure 3.1: Response rate of SMEs

Figure 3.1 indicates that 54 percent of the enterprises were small and 46 percent were micro. A total of 85 percent of the SME owners completed the questionnaires. The other 15 percent SME owners did not respond.

3.4.2 Census study

A census is a study of every unit of the population that have specific characteristics (Australian Bureau of Statistics 2013). This study was employed because the entire population was small. Every member of the population (94) was approached, and data was collected from every member of the population that responded (80). Employing a census study approach resulted in an accurate assessment of the study of the population.

3.4.3 Measuring instrument

The following explains the measuring instrument employed in this study.

- **Questionnaire design**

A questionnaire was used as a measuring instrument in this study. A five point Likert scale was employed. This is a convenient method of collecting data on a concept from a number of different approaches and is easy to read and comprehend (David and Sutton 2011: 259). The questionnaire consisted of closed-ended statements. This technique allowed the participants to only answer the questions and statements given. According to Reja, Manfreda, Hlebec and Vehovar (2003: 161) closed-ended or structured questions restrict the participants to the set of alternatives being presented. Thus, possible situations where participants deviate from the topic are avoided. Moreover, a questionnaire is a pre-expressed written set of questions to which respondents write their responses, normally within clear choices (Sekaran and Bougie 2013: 147). The questionnaire had questions and statements that were brief and easy to read. These questions and statements emanated from the literature review of this study.

- **Measurement scale**

A measuring scale is an instrument by which persons are differentiated as to how they vary from one another on the variables of interest to the study (Sekaran and Bougie 2013: 211). The following are the two types of scales that were taken into consideration in designing the questionnaire:

   ❖ *Nominal scale* - a nominal scale is based on natural categories like gender (that is, male or female) or artificial groupings like proficiency (Brown 2011: 10). This scale enabled the researcher to classify the variables. It was used to label variables such as male or female, and yes or no.

   ❖ *Interval scale* - an interval scale enables particular numerical processes to be executed on the retrieved information from the respondents (Sekaran and Bougie 2013: 214). The means and the standard deviations of the responses on the variables were computed. The interval scale had the same units of measurement, therefore making it likely to interpret not only the scale scores but also the distance between them (Food and Agriculture Organisation 2016). For instance, strongly disagree to strongly agree.

3.5   Recruitment process and data collection method

A letter of information was sent to SME owners requesting them to participate in the study. The researcher obtained written consent from participants. Participants were informed that they could withdraw at any time during the study without providing reasons for doing so. Some questionnaires were e-mailed and others hand delivered to SME owners.

Two research assistants were hired for the distribution and retrieving of questionnaires. They were informed about the nature of the study. The distribution and the retrieval of questionnaires occurred during a 3 month period. The participants were requested to complete the questionnaire within 3 days commencing from the date received. The researcher made phone calls requesting those who did not complete the questionnaire within the period specified to complete them. A total of 80 completed questionnaires were retrieved through hand collection and email.

3.6   Data analysis

Data analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data (Crossman 2014). The study used the latest version of Statistical Package for the Social Sciences (SPSS) to analyse the data. The SPSS consists of an integrated series of computer programmes which enable the user to read data from questionnaire surveys and other sources and to manipulate them in various ways in order to produce a wide range of statistical analysis and reports, together with documentation (Hall 2013). The following subsections discuss the reliability and validity, descriptive statistics and inferential statistics.

3.6.1   Reliability and validity

Reliability is the degree to which the indicator or test is a consistent measure over time, or simply, as to whether the participants give the same responses at a different time (David and Sutton 2011: 266). Cronbach's Alpha was used to measure the reliability of the questionnaire used in this study. A reliability coefficient determines whether the questionnaire was right in expecting a certain gathering of items to produce interpretable statements about individual differences (Cronbach 1951: 297). It checked whether the variables measured were stable or constant.

Validity refers to the degree to which a quantifying tool truly measures and defines the idea it was intended to (David and Sutton 2011: 266). Construct validity was used to ensure that the variables being researched are actually being tested. Construct validity can be regarded as an all-embracing word to assess the validity of the measurement process (for instance, a questionnaire) that is utilised to assess a particular construct (Laerd Dissertation 2012). The literature review was instrumental in determining the variables to be tested.

3.6.2 Descriptive statistics

Descriptive statistics is the examination of data that helps to define, display or summarise data in a relevant manner so that, for instance, summaries might materialise from the data (Laerd Statistics 2013). They are merely a method to label or define the data. Moreover, they are restricted in that they only allow for conclusions about the people or things that are measured. Thus, data that was collected by the researcher was not used to generalise to other people or things. It was used to provide information related to the objectives of this study. It presented and analysed the results relating to the performance measurements that apply to the SMEs, participants' responses regarding the Governmental Financial Incentive Schemes (GFIS), innovative processes at the business and the extent of the physical environment's influence on operational performance of SMEs.

3.6.3 Inferential statistics

Inferential statistics are methods that allow the researcher to use the sample to make generalisations concerning the populations from which the sample has been drafted (Sekaran and Bougie 2013: 303). It is, thus, imperative that the sample truthfully epitomises the population (Laerd Dissertation 2013). Since this research employed a census study, the entire target population of the study was used to draw conclusions as an alternative of selecting a sample to represent the whole population. Thus, the researcher analysed the results of the participants in terms of the population that it represented. The following briefly explains the statistical tools used in this study.

- **One-Sample t-test**

This study used a one-sample t-test. The one-sample t-test is utilised to find out whether a sample comes from a specific population with a particular mean (Laerd

Statistics 2013). An independent sample t-test is employed when there is a comparison of each sample to a "known truth", whereas the independent two-sample t-test is used when there is a comparison of two samples not strictly linked to one another (Explorable.com 2009). The independent sample t-test was employed in this study.

The one-sample statistical test was used to test whether a sample mean (of a usually dispersed interval variable) meaningfully changed from a theorised value. For each variable the mean score was calculated and then tested against the neutral score of '3' to test for significant agreement or disagreement. Furthermore, the one-sample test was used to test the p values of 0.05 in relation to whether there were significant agreements or disagreements between variables.

- **Binomial test**

The binomial test is a thorough examination to compare the perceived distribution to the anticipated distribution when there are two groups (GraphPad Software 2015). It is used for analysing whether an amount from a particular dichotomous variable is equivalent to an alleged population value (Van Den Berg 2014). The binomial test is employed when the population is regarded as merely two classes (Cooper and Schindler 1998: 482). For example, yes and no and effective and ineffective, and every perception plunge into one or the other of these classes. This test was used to test study variables on the government financial incentive schemes. The criterion is based on 0.05 level of significance for accepting the null hypothesis. That is, if the critical p-value is below 0.05, reject the null hypothesis and if it is above the 0.05, accept the null hypothesis.

- **Pearson's Correlation analysis**

The Pearson's correlation was used to analyse the scores of variables. These included innovative processes and operational performance, as well as the extent of physical environment and operational performance. Firstly, a correlation was done on all the statements between innovative processes and operational performance, as well as the extent of physical environment and operational performance. Thereafter the overall correlative values of the stated objectives were calculated. According to Garcia (2011: 1) correlation coefficient measures the strength and direction of a linear relationship between two variables or how well they are connected.

3.7   Confidentiality and anonymity

David and Sutton (2011: 211) state that confidentiality is when the researcher guarantees that nobody outside the research team will be able to recognise the participants in the study and that the responses of persons are not openly communicated to others. Therefore, letters were sent to the participants assuring them that the information they provide on the questionnaire is confidential.

3.8   Conclusion

In this chapter, the research method and design appropriateness were explained. The research site and research design were stated. Moreover, the recruitment process and data collection method, and the data analysis were described. Lastly, confidentiality and anonymity were explained.

The next chapter will present the data analysis. Descriptive and inferential statistics were used for analysis.

CHAPTER 4 : DATA ANALYSIS AND INTERPRETATION OF FINDINGS

4.1 Introduction

The preceding chapter expounded the methodology used in this study. This chapter will present the findings then discuss and interpret the data. The general aim of the investigation undertaken in this study was to investigate factors influencing the operational performance of SMEs in the textile and clothing manufacturing sector in the eThekwini district.

The findings and interpretation will be subdivided into the objectives of the study. These includes the awareness of government financial incentives' influence on operational performance for SME, the innovative processes' influence on the operational performance of SME, and the extent of physical environment's influence on operational performance for SME.

The study will first present the background and biographical details of the participants. These include the participants' gender, age, number of years in the business and the location of the business. Moreover, it will present the results on the operational performance of the business.

The method of analysing will be cross-tabulation using descriptive statistics. Inferential statistics will be used to analyse and interpret the results of the cross-tabulation and graphs. These include the one-sample t-test, aggregate score, the binomial test and the Pearson's correlation. Lastly, the study will present the reliability of the test using Cronbach's Alpha.

The analysis approach will be explained in each section that is represented by the objective being analysed. Having introduced the chapter, the following section presents the profile of the participants.

4.2 Profile of the participants

The following subsections present the profile of the participants including the gender, the age, the number of years in the business and the location of the business.

4.2.1 The participants' gender

Table 4.1 presents the results regarding the gender of the participants.

Table 4.1: Gender of the participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	37	46.3	46.3	46.3
	Female	43	53.8	53.8	100.0
	Total	80	100.0	100.0	

Table 4.1 indicates that the participants are 53.8 percent females and 46.3 percent males. The results reveal that more females are involved in the textile and clothing industry. This is in line with the finding made by Watson and Newby (2005: 131) that more and more females are getting into business.

4.2.2 The participants' age

Table 4.2 presents the results regarding the age of the participants.

Table 4.2: Age of the participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<18	1	1.3	1.3	1.3
	18-25	11	13.8	13.9	15.2
	26-33	39	48.8	49.4	64.6
	34-41	14	17.5	17.7	82.3
	42-49	13	16.3	16.5	98.7
	50+	1	1.3	1.3	100.0
	Total	79	98.8	100.0	
Missing	System	1	1.3		
Total		80	100.0		

Table 4.2 shows that 48.8 percent of the participants are between the ages of 26-33, and 17.5 percent are between the ages of 34-41 years. Moreover, it shows that 16.3 percent of the participants are between the ages of 42-49, and 13.8 percent are between the ages of 18-25. The lowest age category of 1.3 percent was shared by 18 and 50 years. The results indicate that young people are more involved in this type of a business. However, Green (2013: 9) argues that youth businesses do not necessarily develop, persist or deliver maintainable revenues.

4.2.3 The number of years in the business

Table 4.3 presents the results regarding the participants' number of years in the business.

Table 4.3: The number of years in the business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-3 years	15	18.8	18.8	18.8
	4-7 years	37	46.3	46.3	65.0
	8-11 years	20	25.0	25.0	90.0
	12+ years	8	10.0	10.0	100.0
	Total	80	100.0	100.0	

Table 4.3 indicates that 46.3 percent of the participants are between 4-7 years in the business, while 25 percent are between 8-11 years. Moreover, it shows that 18.8 percent of the participants are between 0-3 years in the business, while 10 percent are 12 and above.

4.2.4 The location of the business

Table 4.4 presents the results regarding the business location of the participants.

Table 4.4: The business location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Urban	70	87.5	87.5	87.5
	Rural	1	1.3	1.3	88.8
	Peri-urban	9	11.3	11.3	100.0
	Total	80	100.0	100.0	

Table 4.4 shows that 87.5 percent of the participants have their businesses in urban areas, while 11.3 percent are in peri-urban area. Only 1.3 percent of businesses are located in rural areas.

Having discussed the gender, the ages of the participants, the number of years in the business and the location of the business, the next section presents the descriptive statistics on operational performance of the business.

4.3 Descriptive statistics on operational performance of the business

This section presents and analyses the results regarding the performance measurements that apply to the SMEs. This will include the standard times to perform a task, measurable goals to measure the reliability of a product for customer usage and standards to measure the quality of a product. Moreover, it will present and analyse the set of measurements to monitor how often the business sells and replaces its inventory, labour indices for examining expenses in order to take business decisions and the application of the just-in-time (JIT) system.

Having introduced this section, the following subsections present the results on the participants' responses on the standard times, measurable goals to measure the reliability of a product, standards to measure the quality of a product, inventory management, labour indices and the application of JIT system. It will then present and analyse the results using one-sample statistics, as well as the one-sample test of operational performance of the business.

4.3.1 Standard times to perform a task

Table 4.5 presents and analyses the percentage results on the standard times to perform a task in the business.

Table 4.5: Standard times to perform a task

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.3	1.3	1.3
	Disagree	3	3.8	3.8	5.0
	Neutral	11	13.8	13.8	18.8
	Agree	52	65.0	65.0	83.8
	Strongly agree	13	16.3	16.3	100.0
	Total	80	100.0	100.0	

Table 4.5 indicates that 81.3 percent of participants agree on having operators working within a set of standard times to perform a task, whereas 13.8 percent are neutral and 5.1 percent disagree.

4.3.2 The reliability of a product for customer usage

Table 4.6 presents and analyses the percentage results on the reliability of a product for customer usage.

Table 4.6: Reliability of a product for customer usage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2.5	2.5	2.5
	Neutral	11	13.8	13.8	16.3
	Agree	51	63.8	63.8	80.0
	Strongly agree	16	20.0	20.0	100.0
	Total	80	100.0	100.0	

Table 4.6 shows that 83.8 percent of participants agree on having measurable goals to measure the reliability of a product for customer usage, whereas 13.8 percent are neutral and 2.5 percent disagree. This is in line with the findings made by Natarajan *et al.* (2013: 1144) that global markets nowadays are conquered by an established new product that has a great degree of quality and reliability.

4.3.3 Standards to measure the quality of a product

Table 4.7 presents and analyses the percentage results on the standards to measure the quality of a product.

Table 4.7: Standards to measure the quality of a product are monitored

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Neutral	10	12.5	12.7	13.9
	Agree	49	61.3	62.0	75.9
	Strongly agree	19	23.8	24.1	100.0
	Total	79	98.8	100.0	
Missing	System	1	1.3		
Total		80	100.0		

Table 4.7 shows that 85.1 percent of participants agree on monitoring the standards to measure the quality of a product, whereas 12.5 percent are neutral and 1.3 percent disagree. These results show that standards are monitored to measure the quality of a product in this sector. The findings of Brombacher *et al.* (2012: 873) shows a different conclusion, revealing that businesses find it difficult to deliver products and services that are of the quality which desired by customers.

4.3.4 Inventory management

It is common for businesses to have a set of measurements to monitor how often the business sells and replaces its inventory. Table 4.8 presents and analyses the percentage results regarding inventory management.

Table 4.8: Inventory management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.3	1.3	1.3
	Disagree	1	1.3	1.3	2.5
	Neutral	20	25.0	25.0	27.5
	Agree	43	53.8	53.8	81.3
	Strongly agree	15	18.8	18.8	100.0
	Total	80	100.0	100.0	

Table 4.8 indicates that 72.6 percent of participants agree on having a set of measurements to monitor the frequency the business sells and replaces its inventory, whereas 25.0 percent are neutral and 2.6 percent disagree. These results indicate that SMEs in the textile and clothing industry apply inventory management. This is supported by the finding presented by Rajeev (2008: 659) that business's economic strong point and competitive position is influenced by the management of inventories since this directly affects operating capital, manufacture and customer service.

4.3.5 Labour indices

Businesses use labour indices for examining expenses in order to take business decisions. Table 4.9 presents and analyses the percentage results on the labour indices.

Table 4.9: Labour indices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.3	1.3	1.3
	Disagree	3	3.8	3.8	5.1
	Neutral	16	20.0	20.3	25.3
	Agree	41	51.3	51.9	77.2
	Strongly agree	18	22.5	22.8	100.0
	Total	79	98.8	100.0	
Missing	System	1	1.3		
Total		80	100.0		

Table 4.9 shows that 73.8 percent of participants agree on having labour indices for examining expenses in order to take business decisions, whereas 20.0 percent are neutral and 5.1 percent disagree.

4.3.6 The application of just-in-time system

Table 4.10 presents and analyses the percentage results on the JIT system.

Table 4.10: JIT system as applied in the business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.3	1.3	1.3
	Disagree	7	8.8	8.8	10.0
	Neutral	15	18.8	18.8	28.8
	Agree	39	48.8	48.8	77.5
	Strongly agree	18	22.5	22.5	100.0
	Total	80	100.0	100.0	

Table 4.10 indicates that 71.3 percent of participants agree that they are applying the JIT system, whereas 18.8 percent are neutral and 10.1 percent disagree. These results indicate that SMEs in the textile and clothing industry apply the JIT system in the business. This is contradictory to the findings of Rajam Ramaswamy *et al.* (2002: 85) that JIT is infrequently used in SMEs because they encounter difficulties in setting up JIT.

Having discussed the descriptive statistics on variables relating to the standard times, measurable goals to measure the reliability of a product, standards to measure the quality of a product, inventory management, labour indices and the application of JIT system, the next two subsections presents the one-sample statistics and its test.

4.3.7 One-sample t-test

This study used a one-sample t-test. As explained in the research methodology chapter, the one-sample t-test is utilised to find out whether a sample comes from a specific population with a particular mean (Laerd Statistics 2013).

The one-sample statistics will be used to test whether a sample mean (of a normally distributed variable) meaningfully changes from a theorised value. For each question the mean score was calculated and then tested against the neutral score of '3' to test for significant agreement or disagreement. The one-sample test was used to test the p values of 0.05 in relation to whether there were significant agreements or disagreements between variables.

In addition, the analysis on the one sample statistics and its tests are based on the gender of participants. The gender variable is relevant in all the instances where the one sample statistics and tests are done.

Having explained the one-sample t-test, the next subsections present one-sample statistics and its test for operational performance of the business.

4.3.7.1 One-sample statistics for operational performance of the business

Table 4.11 presents and analyses the mean value results on the one-sample statistics for operational performance of the business.

Table 4.11: One-sample statistics for operational performance of the business

	N	Mean	Std. Deviation	Std. Error Mean
1.0 Operators work within a set of standard times to perform a task	80	3.91	0.750	0.084
2.0 There are measurable goals to measure the reliability of a product for customer usage	80	4.01	0.665	0.074
3.0 Standards to measure the quality of a product are monitored	79	4.09	0.644	0.072
4.0 There are sets of measurements to monitor how often the business sells and replaces its inventory	80	3.88	0.769	0.086
5.0 There are labour indices for examining expenses in order to take business decisions	79	3.91	0.835	0.094
6.0 JIT system, which ensures that the customer is supplied with the product they want on time and in the correct quantity, is applied in the business	80	3.83	0.925	0.103

Table 4.11 shows that the mean values of all the statements are greater than three (>3). This implies significant agreement on:

- ❖ Operators working within a set of standard times to perform a task (3.91);
- ❖ Having measurable goals to measure the reliability of a product for customer usage (4.01);
- ❖ Monitoring standards to measure the quality of a product (4.09);

❖ Having a set of measurements to monitor how often the business sells and replaces its inventory (3.88);

❖ Having labour indices for examining expenses in order to take business decisions (3.91); and

❖ Applying JIT system in the business (3.83).

The statements are presented in Figure 4.1 using the average score.
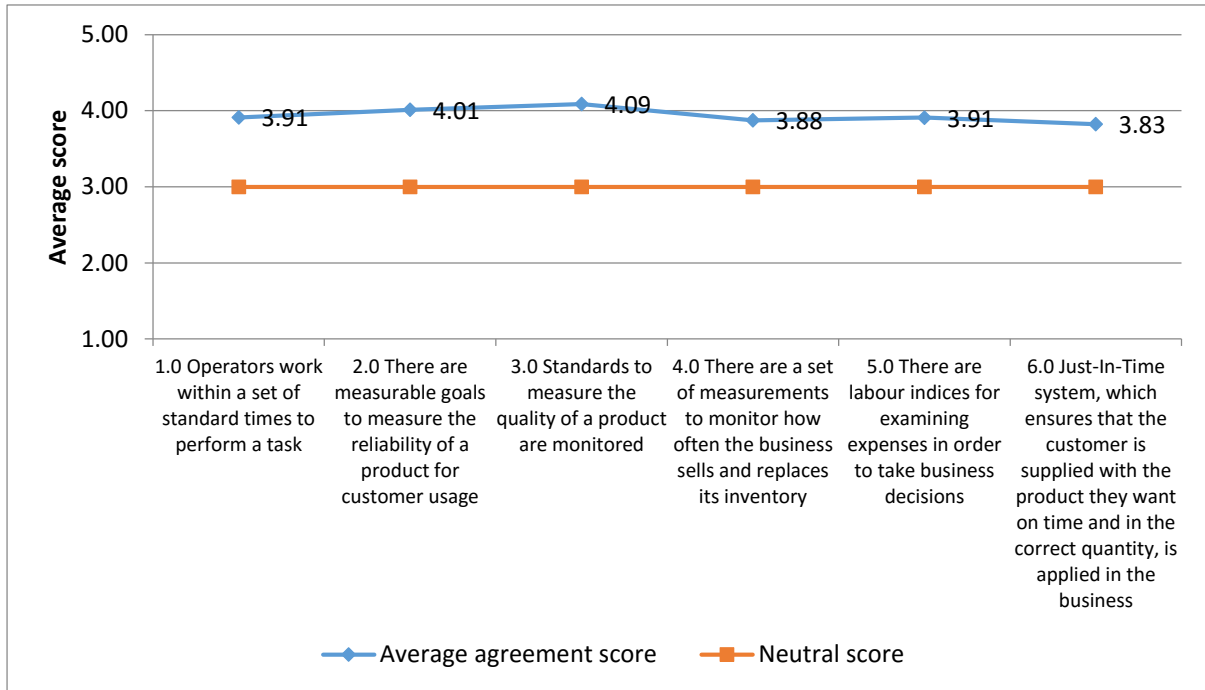
Figure 4.1: The average score for operational performance of the business

Figure 4.1 indicates that the average agreement score is 4.00 and the neutral score is 3.00. The mean values of all the statements are greater than three (>3), with the highest being 4.09 and the lowest being 3.83. As mentioned earlier, this implies significant agreement on all the statements.

4.3.7.2 One-sample test for operational performance of the business

Table 4.12 presents and analyses the significant value results on the one-sample test for operational performance of the business.

Table 4.12: One-sample test for operational performance of the business

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
1.0 Operators work within a set of standard times to perform a task	10.888	79	0.000	0.913	0.75	1.08
2.0 There are measurable goals to measure the reliability of a product for customer usage	13.608	79	0.000	1.013	0.86	1.16
3.0 Standards to measure the quality of a product are monitored	15.017	78	0.000	1.089	0.94	1.23
4.0 There are sets of measurements to monitor how often the business sells and replaces its inventory	10.174	79	0.000	0.875	0.70	1.05
5.0 There are labour indices for examining expenses in order to take business decisions	9.702	78	0.000	0.911	0.72	1.10
6.0 JIT system, which ensures that the customer is supplied with the product they want on time and in the correct quantity, is applied in the business	7.980	79	0.000	0.825	0.62	1.03

Table 4.12 shows that there are significant agreements on all the statements. This suggests that there is enough evidence that:

- ❖ Operators work within a set of standard times to perform a task (t(79) = 10.888, p<0.05);
- ❖ There are measurable goals to measure the reliability of a product for customer usage (t(79) = 13.608, p<0.05);
- ❖ Standards to measure the quality of a product are monitored (t(78) = 15.017, p<0.05);
- ❖ Operators work within measurements to monitor how often the business sells and replaces its inventory (t(79) = 10.174, p<0.05);
- ❖ Operators work within labour indices for examining expenses in order to take business decisions (t(78) = 9.702, p<0.05); and
- ❖ Operators apply JIT system in the business (t(79) = 7.980, p<0.05).

Having discussed the descriptive statistics on operational performance of the business, the next section presents the descriptive statistics on government financial incentive scheme.

4.4   Descriptive statistics on government financial incentive schemes (GFIS)

This section presents and analyses the results relating to participants' responses regarding their awareness of GFIS that are relevant to SMEs and their knowledge regarding accessing the GFIS. Moreover, it presents and analyses the results of participants' responses regarding SMEs that have accessed the GFIS as well as SMEs that are supported by GFIS. Lastly, it will present and analyse the results relating to the participants' responses regarding the impact of government financial incentive support on SMEs. Each subsection will conclude by means of the use of an appropriate tests. These include the binomial test, one-sample statistics and its test, and the aggregate score.

4.4.1 Awareness of GFIS

The following subsections present the results relating to participants' responses regarding their awareness of Black Business Supplier Development Programme (BBSDP), Production Incentive (PI), Sector-Specific Assistance Scheme (SSAS), Manufacturing Investment Programme (MIP) and Isivande Women's Fund (IWF). The analyses will conclude with the binomial test on the awareness of GFIS.

4.4.1.1 Awareness of Black Business Supplier Development Programme

Table 4.13 presents and analyses the percentage results of participants' awareness of BBSDP.

Table 4.13: Awareness of BBSDP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	48	60.0	60.0	60.0
	No	32	40.0	40.0	100.0
	Total	80	100.0	100.0	

Table 4.13 indicates that 60 percent of participants are aware of the BBSDP and 40 percent are not. Even though the results show that the majority of SMEs in the textile and clothing industry are aware of BBSDP, Rogerson (2010: 774) maintained that SMMEs lack awareness of government support.

4.4.1.2 Awareness of the Production Incentive

Table 4.14 presents and analyses the percentage results of participants' awareness of the PI.

Table 4.14: Awareness of the PI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	51.3	51.3	51.3
	No	39	48.8	48.8	100.0
	Total	80	100.0	100.0	

Table 4.14 shows that 51.3 percent of participants are aware of PI and 48.8 percent are not.

4.4.1.3 Awareness of the Sector-Specific Assistance Scheme

Table 4.15 presents and analyses the percentage results of the participants' awareness on the SSAS.

Table 4.15: Awareness of the SSAS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	38	47.5	47.5	47.5
	No	42	52.5	52.5	100.0
	Total	80	100.0	100.0	

Table 4.15 indicates that 47.5 percent of participants are aware of the SSAS and 52.5 percent are not.

4.4.1.4 Awareness of Manufacturing Investment Programme

Table 4.16 presents and analyses the percentage results of the participants' awareness of MIP.

Table 4.16: Awareness of MIP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	39	48.8	48.8	48.8
	No	41	51.3	51.3	100.0
	Total	80	100.0	100.0	

Table 4.16 shows that 48.8 percent of participants are aware of the MIP and 51.3 percent are not.

4.4.1.5 Awareness of Isivande Women's Fund

Table 4.17 presents and analyses the percentage results of the participants' awareness of IWF.

Table 4.17: Awareness of IWF

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	42	52.5	53.2	53.2
	No	37	46.3	46.8	100.0
	Total	79	98.8	100.0	
Missing	System	1	1.3		
Total		80	100.0		

Table 4.17 indicates that 52.5 percent of the total participants are aware of IWF and 46.3 percent are not.

These results indicate that there is a slight difference between the SME owners who are aware of the GFIS and who are not. The following subsection will discuss the binomial test for the awareness of GFIS.

4.4.1.6 Binomial test for the awareness of government financial incentive scheme

The binomial test is a thorough examination to compare the perceived distribution to the anticipated distribution when there are only two groups (GraphPad Software 2015). It is utilised for analysing whether an amount from a particular dichotomous variable is equivalent to an alleged population value (Van Den Berg 2014). Moreover, it is employed when the population is regarded as only two classes (Cooper and Schindler 1998: 482), for example, yes and no or effective and ineffective. The criterion is based on 0.05 level of significance for accepting the null hypothesis. That is, if the critical p-value is below 0.05, reject the null hypothesis and if it is above the 0.05, accept the null hypothesis.

Table 4.18 presents the results and analyses the null hypotheses results from the binomial test.

Table 4.18: Binomial test regarding the awareness of GFIS

		Category	N	Observed Proportion.	Test Proportion.	Asymptotic Significance (2-tailed)
1.0 BBSDP	Group 1	No	32	0.40	0.50	0.093[a]
	Group 2	Yes	48	0.60		
	Total		80	1.00		
2.0 PI	Group 1	No	39	0.49	0.50	0.911[a]
	Group 2	Yes	41	0.51		
	Total		80	1.00		
3.0 SSAS	Group 1	No	42	0.53	0.50	0.738[a]
	Group 2	Yes	38	0.48		
	Total		80	1.00		
4.0 MIP	Group 1	No	41	0.51	0.50	0.911[a]
	Group 2	Yes	39	0.49		
	Total		80	1.00		
5.0 IWF	Group 1	No	37	0.47	0.50	0.653[a]
	Group 2	Yes	42	0.53		
	Total		79	1.00		

The test results displayed in Table 4.18 will be analysed in the following bullets.

- **1.0 BBSDP** - the p-value, represented by asymptotic significance (2-tailed) is 0.093. Thus there is a failure to reject the null hypothesis since chance is higher than 5 percent (p>0.05);

- **2.0 PI** - the p-value, represented by asymptotic significance (2-tailed) is 0.911. Thus there is a failure to reject the null hypothesis since chance is higher than 5 percent (p>0.05);

- **3.0 SSAS** - the p-value, represented by asymptotic significance (2-tailed) is 0.738. Thus there is a failure to reject the null hypothesis since chance is higher than 5 percent (p>0.05);

- **4.0 MIP** - the p-value, represented by asymptotic significance (2-tailed) is 0.911. Thus there is a failure to reject the null hypothesis since chance is higher than 5 percent (p>0.05); and

- **5.0 IWF** - the p-value, represented by asymptotic significance (2-tailed) is 0.653. Thus there is a failure to reject the null hypothesis since chance is higher than 5 percent (p>0.05).

There is no significant difference between the participants who are aware of GFIS and those who are not. This is indicated by the p value that is greater than 0.05 in all the schemes (p>0.05), which means there is a weak evidence against the null hypothesis. Therefore, there is a failure to reject the null hypothesis in all the schemes. Having discussed the results regarding the participants' awareness of GFIS, the next subsection presents participants' knowledge regarding accessing the GFIS.

4.4.2 Knowledge of how to access the Government Financial Incentive Scheme

The next subsections present the results of the SME owners' knowledge of accessing BBSDP, PI, SSAS, MIP and IWF. The one-sample statistics on the knowledge of accessing the GFIS will conclude the subsection.

4.4.2.1 Knowledge of how to access the Black Business Supplier Development Programme

Table 4.19 presents and analyses the percentage results relating to the participants' knowledge of how to access BBSDP.

Table 4.19: Knowledge of how to access the BBSDP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	17	21.3	21.3	21.3
	Disagree	11	13.8	13.8	35.0
	Neutral	8	10.0	10.0	45.0
	Agree	22	27.5	27.5	72.5
	Strongly agree	22	27.5	27.5	100.0
	Total	80	100.0	100.0	

Table 4.19 shows that 55 percent of participants agree that they know how to access BBSDP, whereas 35.1 percent disagree and 10 percent are neutral.

4.4.2.2 Knowledge of how to access the Production Incentive

Table 4.20 presents and analyses the percentage results relating to the participants' knowledge of how to access the PI.

Table 4.20: Knowledge of how to access the PI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	23	28.8	28.8	28.8
	Disagree	14	17.5	17.5	46.3
	Neutral	6	7.5	7.5	53.8
	Agree	21	26.3	26.3	80.0
	Strongly agree	16	20.0	20.0	100.0
	Total	80	100.0	100.0	

Table 4.20 indicates that 46.3 percent of participants agree that they know how to access the PI, while 46.3 percent disagree and 7.5 percent are neutral.

4.4.2.3 Knowledge of how to access the Sector-Specific Assistance Scheme

Table 4.21 presents and analyses the percentage results relating to participants' knowledge of how to access the SSAS.

Table 4.21: Knowledge of how to access the SSAS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	20	25.0	25.0	25.0
	Disagree	15	18.8	18.8	43.8
	Neutral	9	11.3	11.3	55.0
	Agree	18	22.5	22.5	77.5
	Strongly agree	18	22.5	22.5	100.0
	Total	80	100.0	100.0	

Table 4.21 shows that 45 percent of participants agree that they know how to access the SSAS, while 43.8 percent disagree and 11.3 percent are neutral.

4.4.2.4 Knowledge of how to access the Manufacturing Investment Programme

Table 4.22 presents and analyses the percentage results relating to the participants' knowledge of how to access the MIP.

Table 4.22: Knowledge of how to access the MIP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	24	30.0	30.0	30.0
	Disagree	13	16.3	16.3	46.3
	Neutral	13	16.3	16.3	62.5
	Agree	15	18.8	18.8	81.3
	Strongly agree	15	18.8	18.8	100.0
	Total	80	100.0	100.0	

Table 4.22 shows that 37.6 percent of participants agree that they know how to access MIP, while 46.3 percent disagree and 16.3 percent are neutral.

4.4.2.5 Knowledge of how to access the Isivande Women's Fund

Table 4.23 presents and analyses the percentage results relating to the participants' knowledge of how to access the IWF.

Table 4.23: Knowledge of how to access the IWF

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	21	26.3	26.6	26.6
	Disagree	19	23.8	24.1	50.6
	Neutral	5	6.3	6.3	57.0
	Agree	17	21.3	21.5	78.5
	Strongly agree	17	21.3	21.5	100.0
	Total	79	98.8	100.0	
Missing	System	1	1.3		
Total		80	100.0		

Table 4.23 indicates that 42.6 percent of participants agree that they know how to access IWF, while 50.1 percent disagree and 6.3 percent are neutral.

These results indicate that SME owners have knowledge of how to access BBSDP and the SSAS. However, they lack knowledge of how to access the MIP and the IWF. The PI is too close to call since the percentage of participants having knowledge of how to access the PI is similar to those who do not have knowledge. Nonetheless, the difference between those who have knowledge of how to access the schemes and those who do not is very slight. The following subsection presents the one-sample statistics regarding the SMEs knowledge regarding how to access the GFIS.

4.4.2.6 One-sample statistics regarding SMEs knowledge of how to access GFIS

Table 4.24 presents and analyses the mean value of the one-sample statistics of the participants' knowledge of how to access the GFIS.

Table 4.24: One-sample statistics on the SMEs knowledge on accessing the GFIS

	N	Mean	Standard Deviation	Standard Error Mean
1.0 BBSDP	80	1.40	0.493	0.055
2.0 PI	80	1.49	0.503	0.056
3. SSAS	80	1.53	0.503	0.056
4.0 MIP	80	1.51	0.503	0.056
5.0 IWF	79	1.47	0.502	0.057

Table 4.24 shows that all mean values are less than three (<3). This implies significant disagreement on the participants' knowledge regarding access to the GFIS. The statements are presented in Figure 4.2 using the average score.
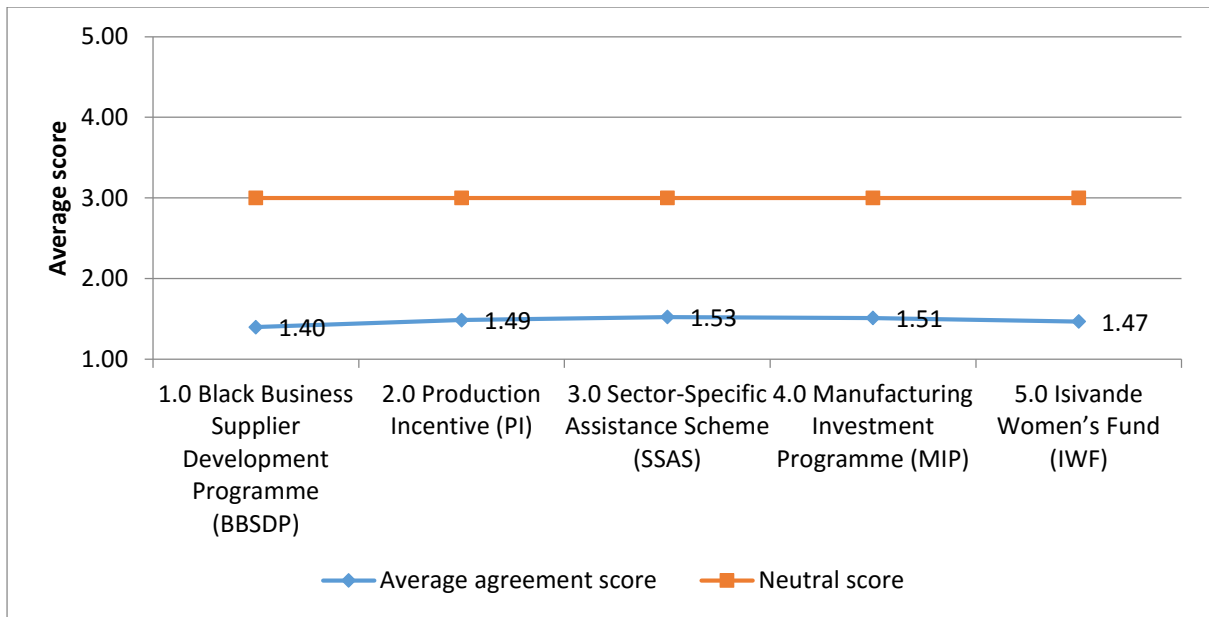
Figure 4.2: The average score regarding knowing how to access the GFIS

Figure 4.2 indicates that the average agreement score is between the average of 1.00 and 2.00. The neutral score is in the average of 3.00. The mean values of all the statements are less than three (<3). As stated earlier, this implies significant disagreement regarding the participants' knowledge of how to access the GFIS.

Having discussed the results regarding participants' knowledge of how to access the GFIS, the following subsection discusses results regarding participants that have accessed the GFIS.

4.4.3 SMEs that have accessed the government financial incentive scheme

The next subsection presents the results of participants that have accessed the BBSDP, PI, SSAS, MIP and IWF. The binomial test results of participants that have accessed the GFIS will conclude this subsection.

4.4.3.1 Access to the Black Business Supplier Development Programme

Table 4.25 presents and analyses the percentage results of the participants that have accessed the BBSDP.

Table 4.25: SMEs that have accessed the BBSDP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	32	40.0	40.0	40.0
	No	48	60.0	60.0	100.0
	Total	80	100.0	100.0	

Table 4.25 shows that 40 percent of participants have accessed BBSDP and 60 percent have not.

4.4.3.2 Access to the Production Incentive

Table 4.26 presents and analyses the percentage results of the participants that have accessed the PI.

Table 4.26: SMEs that have accessed the PI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	29	36.3	36.3	36.3
	No	51	63.8	63.8	100.0
	Total	80	100.0	100.0	

Table 4.26 indicates that 36.3 percent of participants have accessed PI and 63.8 percent have not.

4.4.3.3 Access to the Sector-Specific Assistance Scheme

Table 4.27 presents and analyses the percentage results of the participants that have accessed the SSAS.

Table 4.27: SMEs that have accessed the SSAS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	29	36.3	36.3	36.3
	No	51	63.8	63.8	100.0
	Total	80	100.0	100.0	

Table 4.27 shows that 36.3 percent of participants have accessed SSAS and 63.8 percent have not.

4.4.3.4 Access to the Manufacturing Investment Programme

Table 4.28 presents and analyses the percentage results of the participants that have accessed the MIP.

Table 4.28: SMEs that have accessed the MIP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	28	35.0	35.0	35.0
	No	52	65.0	65.0	100.0
	Total	80	100.0	100.0	

Table 4.28 indicates that 35 percent of participants have accessed the MIP and 65 percent have not.

4.4.3.5 Access to the Isivande Women's Fund

Table 4.29 presents and analyses the percentage results of the participants that have accessed the IWF.

Table 4.29: SMEs that have accessed the IWF

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	24	30.0	30.0	30.0
	No	56	70.0	70.0	100.0
	Total	80	100.0	100.0	

Table 4.29 shows that 30 percent of the total participants have accessed the IWF and 70 percent have not.

These results indicate that the majority of SMEs in the textile and clothing industry have not accessed GFIS. The findings are in line with the criticism made by Rogerson (2010: 775) that the cumbersome administrative processes together with the constant variations in programmes and the high search costs imposed on SMME owners act to discourage SMMEs from applying for assistance to obtainable programmes for accessing services.

The following subsection presents the binomial test of SMEs that have accessed GFIS.

4.4.3.6 Binomial test of SMEs that have accessed to GFIS

Table 4.30 presents and analyses the null hypotheses results of the binomial test results of the participants that have accessed GFIS.

Table 4.30: Binomial test of SMEs that have accessed GFIS

		Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)
1.0 BBSDP	Group 1	No	48	0.60	0.50	0.093[a]
	Group 2	Yes	32	0.40		
	Total		80	1.00		
2.0 PI	Group 1	No	51	0.64	0.50	0.018[a]
	Group 2	Yes	29	0.36		
	Total		80	1.00		
3.0 SSAS	Group 1	No	51	0.64	0.50	0.018[a]
	Group 2	Yes	29	0.36		
	Total		80	1.00		
4.0 MIP	Group 1	No	52	0.65	0.50	0.010[a]
	Group 2	Yes	28	0.35		
	Total		80	1.00		
5.0 IWF	Group 1	No	56	0.70	0.50	0.000[a]
	Group 2	Yes	24	0.30		
	Total		80	1.00		

The results displayed in Table 4.30 will be analysed in the following bullets.

- **1.0 BBSDP** - the p-value, represented by asymptotic significance (2-tailed) is 0.093. Thus there is a failure to reject the null hypothesis since chance is higher than 5 percent (p>0.05);
- **2.0 PI** - the p-value, represented by asymptotic significance (2-tailed) is 0.018. Thus there is a rejection of the null hypothesis since chance is less than 5 percent (p<0.05);

- **3.0 SSAS** - the p-value, represented by asymptotic significance (2-tailed) is 0.018. Thus there is a rejection of the null hypothesis since chance is less than 5 percent ($p<0.05$);

- **4.0 MIP** - the p-value, represented by asymptotic significance (2-tailed) is 0.010. Thus there is a rejection of the null hypothesis since chance is less than 5 percent ($p<0.05$); and

- **5.0 IWF** - the p-value, represented by asymptotic significance (2-tailed) is 0.000. Thus there is a rejection of the null hypothesis since chance is less than 5 percent ($p<0.05$).

The above findings indicate that a significant majority of SMEs have not accessed PI at 0.018, SSAS at 0.018, MIP at 0.010 and IWF at 0.000. They are all below the conversion standard p value of 0.05. There is a strong evidence against the null hypothesis. Therefore, there is a rejection of the null hypothesis in those four schemes. Moreover, there is no significant difference between SMEs that have accessed BBSDP ($p>0.05$) and those who have not. There is a weak evidence against the null hypothesis. Thus there is a failure to reject the null hypothesis. Figure 4.3 is a graphical presentation of the results.
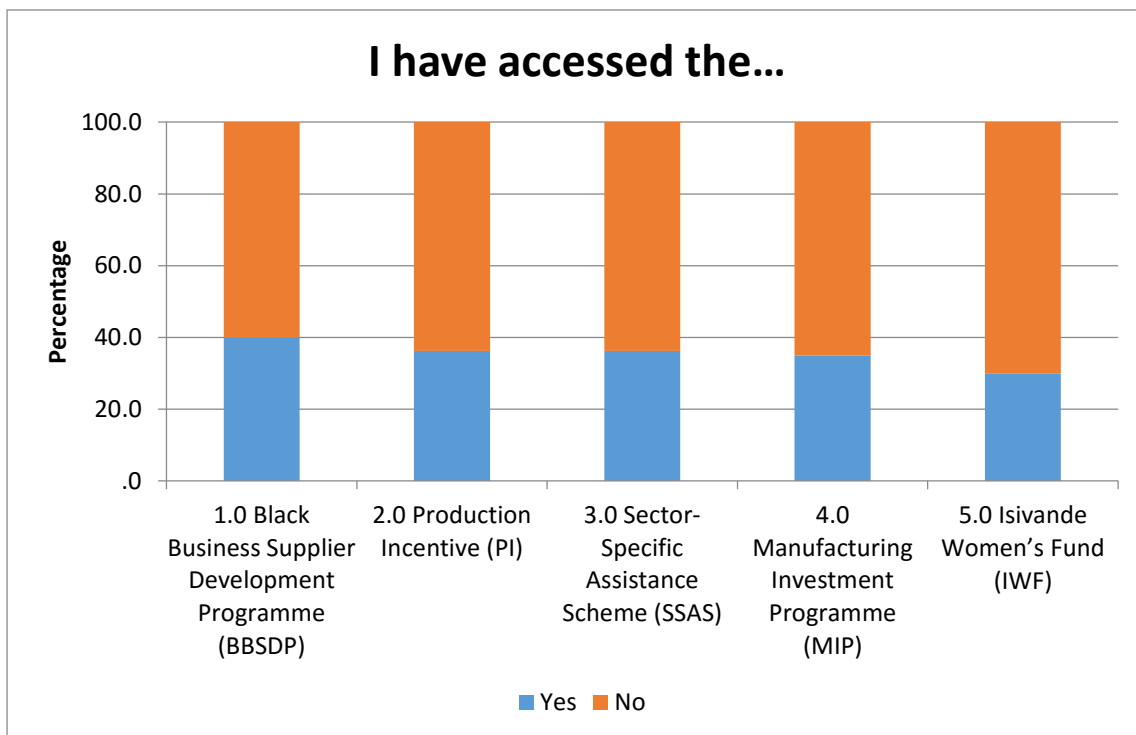
Figure 4.3: SMEs that have accessed the GFIS

Figure 4.3 shows that the significant majority of SMEs have not accessed PI, SSAS, MIP and IWF.

Having discussed the results of the SME participants that have accessed GFIS, the following subsection presents the results of the SME participants that are supported by GFIS.

4.4.4 SMEs supported by the GFIS

The next subsection presents the results of SMEs that are supported by BBSDP, PI, SSAS, MIP and IWF. The binomial test results on the SME participants supported by GFIS will conclude this sub section.

4.4.4.1 SMEs supported by the Black Business Supplier Development Programme

Table 4.31 presents and analyses the percentage results of the participants supported by the BBSDP.

Table 4.31: SMEs supported by the BBSDP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	24	30.0	30.0	30.0
	No	56	70.0	70.0	100.0
	Total	80	100.0	100.0	

Table 4.31 indicates that 30 percent of participants are supported by the BBSDP and 70 percent are not.

4.4.4.2 SMEs supported by the Production Incentive

Table 4.32 presents and analyses the percentage results of the participants supported by the PI.

Table 4.32: SMEs supported by the PI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	14	17.5	17.5	17.5
	No	66	82.5	82.5	100.0
	Total	80	100.0	100.0	

Table 4.32 shows that 17.5 percent of participants are supported by the PI and 82.5 percent are not.

4.4.4.3 SMEs supported by the Sector-Specific Assistance Scheme

Table 4.33 presents and analyses the percentage results of the participants supported by the SSAS.

Table 4.33: SMEs supported by the SSAS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	19	23.8	23.8	23.8
	No	61	76.3	76.3	100.0
	Total	80	100.0	100.0	

Table 4.33 shows that 23.8 percent of participants are supported by the SSAS and 76.3 percent are not.

4.4.4.4 SMEs supported by the Manufacturing Investment Programme

Table 4.34 presents and analyses the percentage results of the participants supported by the MIP.

Table 4.34: SME supported by the MIP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	14	17.5	17.5	17.5
	No	66	82.5	82.5	100.0
	Total	80	100.0	100.0	

Table 4.34 indicates that 17.5 percent of participants are supported by the MIP and 82.5 percent are not.

4.4.4.5 SMEs supported by the Isivande Women's Fund

Table 4.35 presents and analyses the percentage results of the participants supported by the IWF.

Table 4.35: SMEs supported by the IWF

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	13	16.3	16.3	16.3
	No	67	83.8	83.8	100.0
	Total	80	100.0	100.0	

Table 4.35 shows that 16.3 percent of participants are supported by the IWF and 83.8 percent are not.

These results indicate that the majority of SMEs in the textile and clothing industry are not supported by the GFIS. This is in line with the findings of Rogerson (2010: 771) who is of the view that the existing national support programmes do not live up to expectations in terms of assisting SMEs. Similarly, Mbonyane and Ladzani (2011: 550) state that the SA government originally did not provide sufficient assistance to the small business sector as compared to larger companies.

The following subsection presents the binomial test results of the SMEs supported by GFIS.

4.4.4.6 Binomial test of the SMEs supported by GFIS

Table 4.36 presents and analyses the null hypotheses results of the binomial test results of participants supported by GFIS.

Table 4.36: Binomial test results of SMEs supported by GFIS

		Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)
1.0 BBSDP	Group 1	No	56	0.70	0.50	0.000[a]
	Group 2	Yes	24	0.30		
	Total		80	1.00		
2.0 PI	Group 1	No	66	0.83	0.50	0.000[a]
	Group 2	Yes	14	0.18		
	Total		80	1.00		
3.0 SSAS	Group 1	No	61	0.76	0.50	0.000[a]
	Group 2	Yes	19	0.24		
	Total		80	1.00		
4.0 MIP	Group 1	No	66	0.83	0.50	0.000[a]
	Group 2	Yes	14	0.18		
	Total		80	1.00		
5.0 IWF	Group 1	No	67	0.84	0.50	0.000[a]
	Group 2	Yes	13	0.16		
	Total		80	1.00		

The test results displayed in Table 4.36 will be analysed in the following bullets.

- **1.0 BBSDP** - the p-value, represented by asymptotic significance (2-tailed) is 0.000. Thus there is a rejection of the null hypothesis since chance is less than 5 percent ($p<0.05$);
- **2.0 PI** - the p-value, represented by asymptotic significance (2-tailed) is 0.000. Thus there is a rejection of the null hypothesis since chance is less than 5 percent ($p<0.05$);
- **3.0 SSAS** - the p-value, represented by asymptotic significance (2-tailed) is 0.000. Thus there is a rejection of the null hypothesis since chance is less than 5 percent ($p<0.05$);

- **4.0 MIP** - the p-value, represented by asymptotic significance (2-tailed) is 0.000. Thus there is a rejection of the null hypothesis since chance is less than 5 percent ($p<0.05$); and

- **5.0 IWF** - the p-value, represented by asymptotic significance (2-tailed) is 0.000. Thus there is a rejection of the null hypothesis since chance is less than 5 percent ($p<0.05$).

These findings indicate that a significant majority of SMEs in the textile and clothing industry are not supported by BBSDP at 0.000, PI at 0.000, SSAS at 0.000, MIP at 0.000 and IWF at 0.000. They are all below the conversion standard p value of 0.05. There is a strong evidence against the null hypothesis. Thus there is a rejection of the null hypothesis in all the schemes. Figure 4.4 is a graphical presentation of the results.
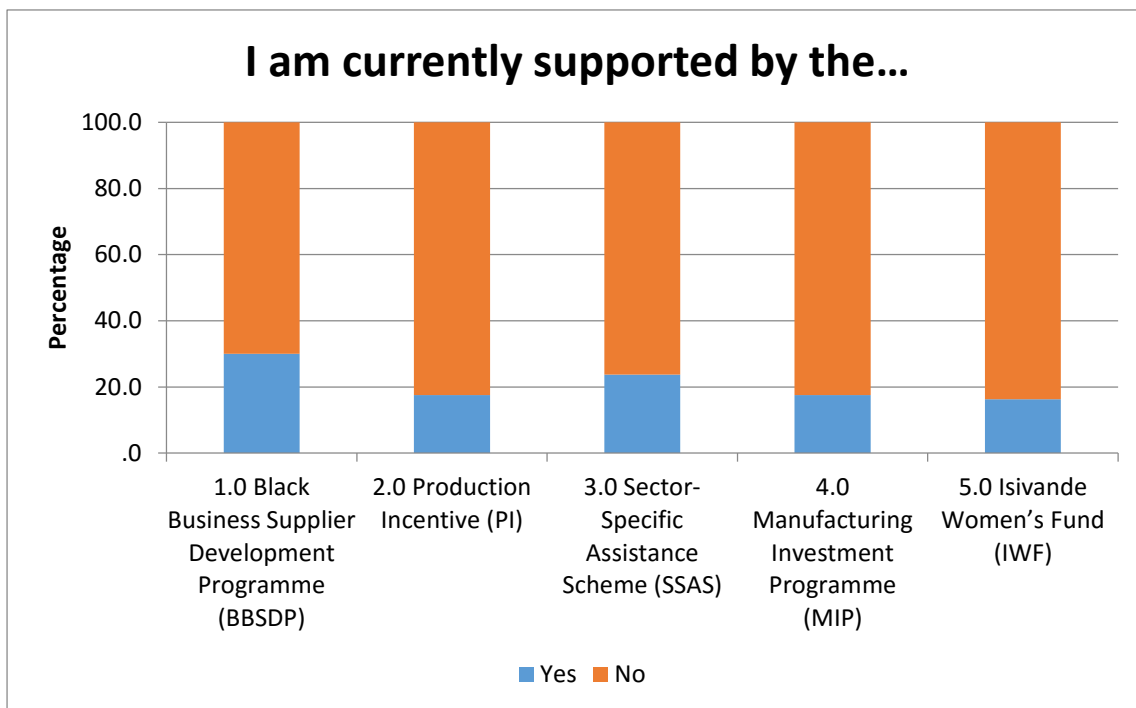
Figure 4.4: SME supported by GFIS

Figure 4.4 shows that a significant majority of SMEs are not supported by GFIS.

Having discussed the findings regarding SMEs supported by GFIS, the following subsection presents results regarding the impact of GFIS on SMEs.

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4.4.5 The impact of GFIS on SMEs

The next subsections present the results relating to the fulfilment of SME objective(s) through GFIS and the effect of using GFIS. The one-sample statistics and its test will conclude this subsection.

4.4.5.1 The fulfilment of SME objective(s) through GFIS

Table 4.37 presents and analyses the percentage results of the fulfilment of SME objective(s) through government financial incentive support.

Table 4.37: Fulfilment of the SME objective(s)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	15	18.8	18.8	18.8
	Disagree	10	12.5	12.5	31.3
	Neutral	16	20.0	20.0	51.3
	Agree	26	32.5	32.5	83.8
	Strongly agree	13	16.3	16.3	100.0
	Total	80	100.0	100.0	

Table 4.37 indicates that 48.8 percent of participants agree that GFIS fulfils the business objective(s), while 31.3 percent disagree and 20 percent are neutral.

Having discussed the fulfilment of SMEs' objective(s) through GFIS, the following subsection presents the effect of using GFIS.

4.4.5.2 The influence of using GFIS

Table 4.38 presents and analyses the percentage results of the influence of using GFIS.

Table 4.38: The influence of using GFIS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	8	10.0	10.0	10.0
	Disagree	6	7.5	7.5	17.5
	Neutral	12	15.0	15.0	32.5
	Agree	33	41.3	41.3	73.8
	Strongly agree	21	26.3	26.3	100.0
	Total	80	100.0	100.0	

Table 4.38 shows that 67.6 percent of participants agree that there is a positive influence in using GFIS, while 17.5 percent disagree and 15 percent are neutral.

Having discussed the effect of using GFIS, the following subsection presents the results of the one-sample statistics concerning the impact GFIS on SMEs.

4.4.5.3 One-sample statistics on the impact of GFIS on SMEs

Table 4.39 presents and analyses the mean value results of the impact of GFIS support on SMEs.

Table 4.39: The government financial incentive support fulfils the business objective(s)

	N	Mean	Std. Deviation	Std. Error Mean
1.0 The government financial incentive support fulfils the business objective(s)	80	3.15	1.360	0.152

Table 4.39 indicates that the mean value of the statement is greater than three (>3) which implies significant agreement that GFIS its support fulfils the business objective(s).

Table 4.40 presents and analyses the mean value results of the effect of using GFIS.

Table 4.40: The effect of using GFIS

	N	Mean	Std. Deviation	Std. Error Mean
1.0 There is positive influence in using the government financial incentive support	80	3.66	1.232	0.138

Table 4.40 indicates that the mean value of the statement is greater than three (>3) which implies significant agreement on the positive influence of using GFIS.

The two statements are presented in Figure 4.5 using the average score.
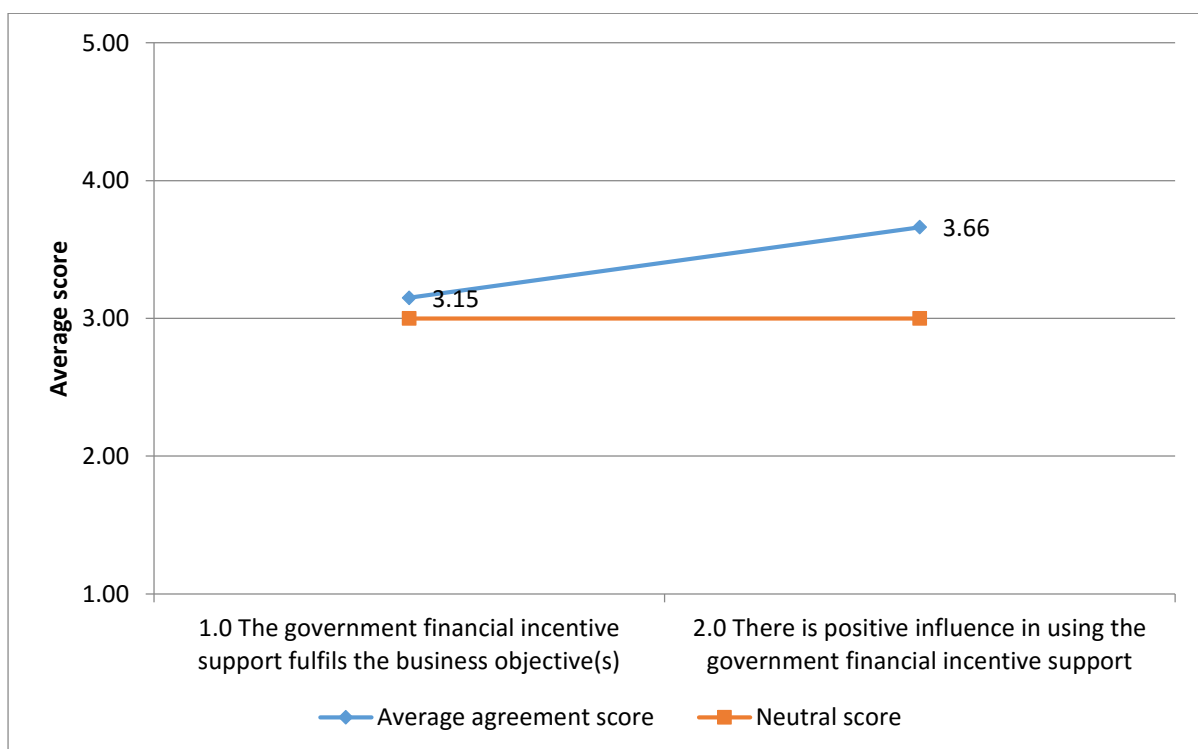
Figure 4.5: The fulfilment of the business' objective(s) and the effect in using GFIS

Figure 4.5 shows that the average agreement score is between the average of 3.00 and 4.00. The neutral score is an average of 3.00. The mean values of the two statements is greater than three (>3). As stated earlier, this implies significant agreement that GFIS fulfils the business objective(s) and that there is a positive influence in using GFIS.

Having presented the results on the one-sample statistics regarding the impact of GFIS on SMEs, the following subsection presents the one-sample test on the impact of GFIS on SMEs.

4.4.5.4 One-sample test on the impact of GFIS on SMEs

Table 4.41 presents and analyses the significance value results of the one-sample test concerning the impact of GFIS on SMEs.

Table 4.41: One-sample test results of effect of using GFIS

	Test Value = 3				95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
1.0 There is positive influence in using the government financial incentive support	4.810	79	0.000	0.663	0.39	0.94

Table 4.41 shows that there is significant agreement that there is a positive influence in using GFIS (t(79) = 4.810, p<0.05).

These results indicate that SMEs would welcome the financial incentive support from the government as they perceive the positive influence in using it.

Having presented the results on the impact of government financial incentive support on SMEs, the following section presents the descriptive statistics on the innovative processes at the business.

4.5 Descriptive statistics on the innovative processes at the business

This section presents and analyses the results relating to the investigation of problems before working on improvements, the improvement of processes, risk-taking, employee motivation and the work environment's impact on innovative processes. Moreover, it presents and analyses the financial resources available for innovative processes, work settings that allow for innovative processes, the testing of innovative process and employee involvement in the process of experimentation. Lastly, it presents and analyses the time available for the innovation process, business policies that allow employees to practise innovation processes, ongoing communication between the manager(s) and employees on problem solving, and rewards to employees for being innovative.

Having introduced this section, the following subsections, which were earlier introduced in this section, will be presented. The one-sample statistics and its test of the innovation processes in the business will conclude the section.

4.5.1 Investigation of problems before working on improvements

Table 4.42 presents and analyses the percentage results of the investigation of problems before working on improvements.

Table 4.42: The investigation of problems before working on improvements

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2.5	2.5	2.5
	Neutral	5	6.3	6.3	8.8
	Agree	49	61.3	61.3	70.0
	Strongly agree	24	30.0	30.0	100.0
	Total	80	100.0	100.0	

Table 4.42 indicates that 91.3 percent of participants agree on investigating problems before working on improvements, whereas 6.3 percent are neutral and 2.5 percent disagree.

4.5.2 Improvement of processes

Table 4.43 presents and analyses the percentage results related to the variable for identifying the need to improve processes through innovation.

Table 4.43: Improvement processes through innovation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2.5	2.5	2.5
	Neutral	9	11.3	11.3	13.8
	Agree	45	56.3	56.3	70.0
	Strongly agree	24	30.0	30.0	100.0
	Total	80	100.0	100.0	

Table 4.43 indicates that 86.3 percent of participants agree on identifying the need to improve processes through innovation, whereas 11.3 percent are neutral and 2.5 percent disagree.

4.5.3 Risk-taking

Table 4.44 presents and analyses the percentage results regarding the risks that are taken in order to have a positive impact on the improvement of processes.

Table 4.44: Risk-taking for the improvement of process

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	5	6.3	6.3	6.3
	Neutral	15	18.8	19.0	25.3
	Agree	34	42.5	43.0	68.4
	Strongly agree	25	31.3	31.6	100.0
	Total	79	98.8	100.0	
Missing	System	1	1.3		
Total		80	100.0		

Table 4.44 indicates that 73.8 percent of participants agree on taking risks in order to have a positive impact on improvement processes, whereas 18.8 percent are neutral and 6.3 percent disagree. These results indicate that SME owners in the textile and clothing industry take risks to improve their processes. This is in line with the findings made by the Ten top tips for SMME success (2014: 15) that risk-taking is a major feature of being a businessperson, and that taking risks in SMMEs depends on the individual behaviour of the owner, who is the main decision taker in the business (Acar and Goc 2011: 841).

4.5.4 Employee motivation

Table 4.45 presents and analyses the percentage results of the manner in which things are done to motivate employees to be innovative.

Table 4.45: Employee motivation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2.5	2.5	2.5
	Neutral	11	13.8	13.8	16.3
	Agree	36	45.0	45.0	61.3
	Strongly agree	31	38.8	38.8	100.0
	Total	80	100.0	100.0	

Table 4.45 indicates that 83.8 percent of participants agree that the manner in which things are done in the business motivates their employees to be innovative, whereas 13.8 percent are neutral and 2.5 percent disagree. These results show SME owners in the textile and clothing industry motivate their employees to be innovative.

4.5.5 Work environments' impact on innovation process

Table 4.46 presents and analyses the percentage results regarding the work environments that support the innovation process to allow employees to gain respect among themselves.

Table 4.46: Work environment that supports innovation process

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Neutral	11	13.8	13.8	15.0
	Agree	39	48.8	48.8	63.8
	Strongly agree	29	36.3	36.3	100.0
	Total	80	100.0	100.0	

Table 4.46 indicates that 85.1 percent of participants agree that their work environment supports the innovation process which allows employees to gain respect among themselves, whereas 13.8 percent are neutral and 1.3 percent disagree. These results indicate that SME owners in the textile industry have work environments which support

the innovation process. This is in line with the findings made by Rothe *et al.* (2012: 79) that personal necessities and preferences of the workers should be taken into consideration in the work environment design in order to enhance operational performance in the business.

4.5.6 Financial resources for innovative processes

Table 4.47 presents and analyses the percentage results regarding financial resources which are assigned to support innovative processes.

Table 4.47: Financial resources are assigned to support innovative processes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	3.8	3.8	3.8
	Neutral	7	8.8	8.8	12.5
	Agree	40	50.0	50.0	62.5
	Strongly agree	30	37.5	37.5	100.0
	Total	80	100.0	100.0	

Table 4.47 indicates that 87.5 percent of the total participants agree that they assign financial resources to support innovative processes, whereas 8.8 percent are neutral and 3.8 percent disagree. These results show that SME owners in the textile and clothing industry assign financial resources to support the innovation process. This contradicts with the finding made by Oriaku (2012: 19) that small businesses have not thus far encompassed the necessity to completely assimilate financial arrangement and capital arrangements with operational arrangement in their daily business.

4.5.7 Work settings that allow for innovative processes

Table 4.48 presents and analyses the percentage results of the work settings which allow for innovative processes.

Table 4.48: Work settings that allows for innovative processes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Neutral	8	10.0	10.0	11.3
	Agree	51	63.8	63.8	75.0
	Strongly agree	20	25.0	25.0	100.0
	Total	80	100.0	100.0	

Table 4.48 indicates that 88.8 percent of participants agree that their work settings allow for innovative processes, whereas 10 percent are neutral and 1.3 percent disagree.

4.5.8 Testing of the innovation process

Table 4.49 presents and analyses the percentage results of the testing of the innovative process before implementation.

Table 4.49: The innovative process is tested before implementation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Neutral	7	8.8	8.8	10.0
	Agree	47	58.8	58.8	68.8
	Strongly agree	25	31.3	31.3	100.0
	Total	80	100.0	100.0	

Table 4.49 shows that 90.1 percent of participants agree that the innovative process is tested before implementation, whereas 8.8 percent are neutral and 1.3 percent disagree.

4.5.9 Employee involvement in the process of experimentation

Table 4.50 presents and analyses the percentage results of the employees' involvement in the process experimentation.

Table 4.50: Employees' involvement in the process of experimentation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	3.8	3.8	3.8
	Neutral	7	8.8	8.8	12.5
	Agree	44	55.0	55.0	67.5
	Strongly agree	26	32.5	32.5	100.0
	Total	80	100.0	100.0	

Table 4.50 indicates that 87.5 percent of the total participants agree that employees are involved in the process of experimentation, whereas 8.8 percent are neutral and 3.8 percent disagree.

4.5.10 Time for the innovation process

Table 4.51 presents and analyses the percentage results of the time for the innovation process.

Table 4.51: Time for the innovation process

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	5.0	5.1	5.1
	Neutral	10	12.5	12.7	17.7
	Agree	38	47.5	48.1	65.8
	Strongly agree	27	33.8	34.2	100.0
	Total	79	98.8	100.0	
	Missing System	1	1.3		
Total		80	100.0		

Table 4.51 shows that 81.3 percent of participants agree that there is time for the innovation process, whereas 12.5 percent are neutral and 5.0 percent disagree.

4.5.11 Business policies that allow employees to practise innovative processes

Table 4.52 presents and analyses the percentage results of the business policies that allow employees to be freely innovative.

Table 4.52: Business policies that allow employees to be freely innovative

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.3	1.3	1.3
	Disagree	8	10.0	10.0	11.3
	Neutral	9	11.3	11.3	22.5
	Agree	39	48.8	48.8	71.3
	Strongly agree	23	28.8	28.8	100.0
	Total	80	100.0	100.0	

Table 4.52 indicates that 77.6 percent of participants agree that business policies allow employees to be freely innovative, whereas 11.3 percent are neutral and 11.3 percent disagree.

4.5.12 Communication between the manager(s) and employees on problem solving

Table 4.53 presents and analyses the percentage results of ongoing communication between the manager(s) and employees on problem solving.

Table 4.53: Communication between the manager(s) and employees on problem solving

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Neutral	3	3.8	3.8	5.0
	Agree	41	51.3	51.3	56.3
	Strongly agree	35	43.8	43.8	100.0
	Total	80	100.0	100.0	

Table 4.53 indicates that 95.1 percent of participants agree that there is ongoing communication between the manager(s) and employees on problem solving, whereas 3.8 percent are neutral and 1.3 percent disagree. These results show that SME owners communicate with their employees to solve problems. However, this is contradictory

with the findings made by Andries and Czarnitzki (2014: 21) that SMMEs tend to rely mostly on the owner's personal understanding for evolving innovations.

4.5.13 Rewards to employees for being innovative

Table 4.54 presents and analyses the percentage results regarding the rewards (for example praise, promotions, etc.) to employees for innovative practise.

Table 4.54: Rewards given for innovative practise

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Neutral	17	21.3	21.3	22.5
	Agree	39	48.8	48.8	71.3
	Strongly agree	23	28.8	28.8	100.0
	Total	80	100.0	100.0	

Table 4.54 shows that 77.6 percent of the total participants agree that rewards (for example praise, promotions, etc.) are given for innovative practise, whereas 21.3 percent are neutral and 1.3 percent disagree. These results indicate that SME owners give rewards to employees for innovative practises. This is in line with the findings made by Stumpt *et al.* (2013: 21) that workers are inspired by both extrinsic rewards (for instance, the wages, promotions etc.) and intrinsic rewards (for instance, performing work that is meaningful) which encourages them to be innovative in the business.

The following subsection presents the one-sample statistics for innovative processes at the business.

4.5.14 One-sample statistics for innovative processes at the business

Table 4.55 presents and analyses the mean value results on the one-sample statistics concerning the innovative processes at the business.

Table 4.55: One-sample statistics on the innovative processes at the business

	N	Mean	Standard Deviation	Standard Error Mean
1.0 Problems are investigated before working on improvements	80	4.19	0.658	0.074
2.0 The need to improve processes through innovation is identified	80	4.14	0.707	0.079
3.0 Risks are taken in order to have positive impact on improvement processes	79	4.00	0.877	0.099
4.0 The manner in which things are done motivates our employees to be innovative	80	4.20	0.770	0.086
5.0 Our work environment supports innovative process which allows employees to gain respect among themselves	80	4.20	0.719	0.080
6.0 Financial resources are assigned to support innovative process	80	4.21	0.758	0.085
7.0 Our work settings allow for innovative process	80	4.13	0.624	0.070
8.0 The innovative process is tested before implementation	80	4.20	0.644	0.072
9.0 Employees are involved in the process experimentation	80	4.16	0.737	0.082
10.0 There is time for innovative process	79	4.11	0.816	0.092
11.0 Business policies allow employees to be freely innovative	80	3.94	0.959	0.107
12.0 There is ongoing communication between the manager(s) and employees on problem solving	80	4.38	0.624	0.070
13.0 Rewards (for example praise, promotions, etc.) are given for innovative practice	80	4.05	0.745	0.083

Table 4.55 indicates that the mean value of all the statements are greater than three (>3) which implies significant agreement on:

❖ The investigation of problems before working on improvements (4.19);

❖ Identifying the need to improve processes through innovation (4.14);

- ❖ Taking risks in order to have a positive impact on improvement processes (4.00);
- ❖ The manner of doing things which motivates employees to be innovative (4.20);
- ❖ Having a work environment which supports the innovation process and allows employees to gain respect among themselves (4.20);
- ❖ Assigning the financial resources to support innovative processes (4.21);
- ❖ Allowing a work setting which supports the innovation process (4.13);
- ❖ Testing the innovative process before implementation (4.20);
- ❖ Involving employees in the process of experimentation (4.16);
- ❖ Having time for the innovation process (4.11);
- ❖ Having business policies which allow employees to be freely innovative (3.94);
- ❖ Having an ongoing communication between the manager(s) and employees on problem solving (4.38); and
- ❖ Giving rewards (for example praise, promotions, etc.) for innovative practise (4.05).

The statements are presented in Figure 4.6 using the average score.
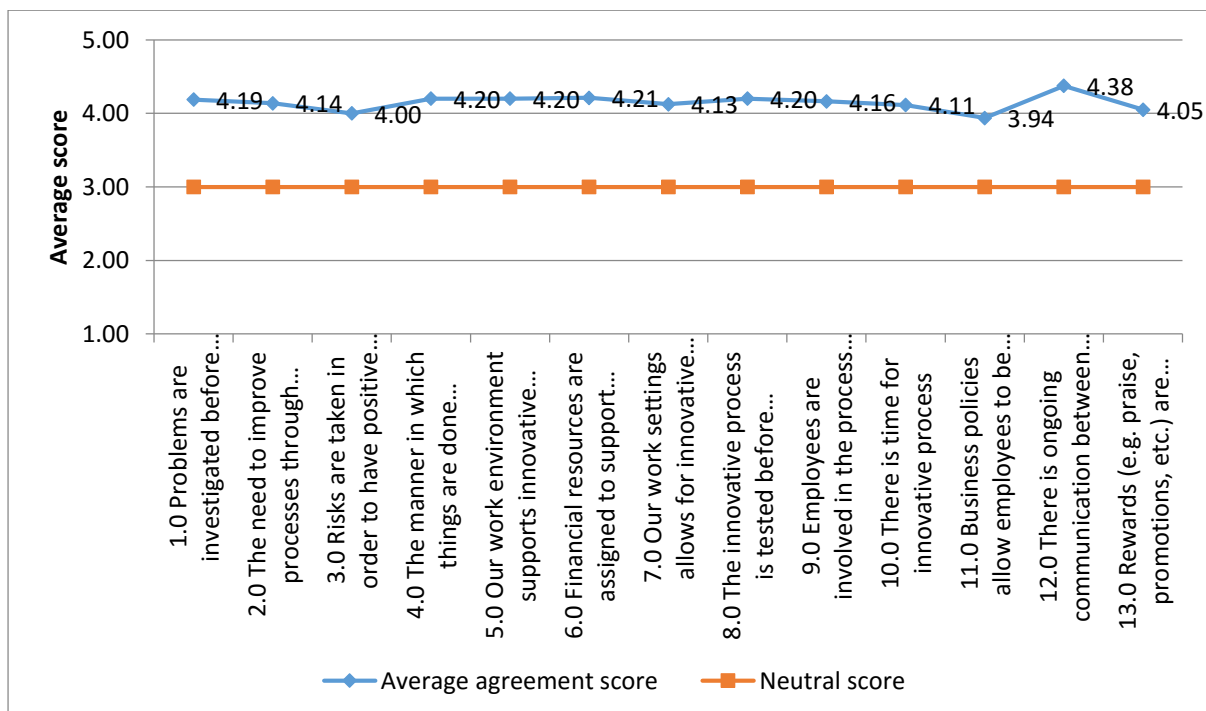
Figure 4.6: The average score of innovative processes at the business

Figure 4.6 shows that the average agreement score is at 4.00 and the neutral score at 3.00. The mean values of all the statements are greater than three (>3), with the

highest being 4.38 and the lowest being 3.94. As mentioned earlier, this implies significant agreement on all the statements.

The following subsection presents the one-sample test for innovative processes at the business.

4.5.15 One-sample test for innovative processes at the business

Table 4.56 presents and analyses the significance value results on the one-sample test of innovative processes at the business.

Table 4.56: One-sample test of innovative processes at the business

	Test Value = 3				95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
1.0 Problems are investigated before working on improvements	16.146	79	0.000	1.188	1.04	1.33
2.0 The need to improve processes through innovation is identified	14.391	79	0.000	1.138	0.98	1.29
3.0 Risks are taken in order to have positive impact on improvement processes	10.134	78	0.000	1.000	0.80	1.20
4.0 The manner in which things are done motivates our employees to be innovative	13.945	79	0.000	1.200	1.03	1.37
5.0 Our work environment supports innovative process which allows employees to gain respect among themselves	14.935	79	0.000	1.200	1.04	1.36
6.0 Financial resources are assigned to support innovative process	14.308	79	0.000	1.213	1.04	1.38
7.0 Our work setting allows for innovative process	16.128	79	0.000	1.125	0.99	1.26
8.0 The innovative process is tested before implementation	16.657	79	0.000	1.200	1.06	1.34
9.0 Employees are involved in the process experimentation	14.112	79	0.000	1.162	1.00	1.33
10.0 There is time for innovative process	12.129	78	0.000	1.114	0.93	1.30

11.0 Business policies allow employees to be freely innovative	8.742	79	0.000	0.938	0.72	1.15
12.0 There is ongoing communication between the manager(s) and employees on problem solving	19.712	79	0.000	1.375	1.24	1.51
13.0 Rewards (for example the praise, promotions, etc.) are given for innovative practise	12.613	79	0.000	1.050	0.88	1.22

Table 4.56 indicates that there are significant agreements on all the statements. This suggests that there is enough evidence that SMEs:

❖ Investigate problems before working on improvements (t(79) = 16.146, p<0.05);

❖ Identify a need to improve processes through innovation (t(79) = 14.391, p<0.05);

❖ Take risks in order to have a positive impact on improvement processes (t(78) = 10.134, p<0.05);

❖ Motivate their employees to be innovative through the way they do things (t(79) = 13.945, p<0.05);

❖ Have a work environment that supports innovative process which allows employees to gain respect among themselves (t(79) = 14.935, p<0.05);

❖ Assign financial resources to support innovative process (t(79) = 14.308, p<0.05);

❖ Have work settings which allow for innovative processes (t(79) = 16.128, p<0.05);

❖ Test innovative process before implementation (t(79) = 16.657, p<0.05);

❖ Involve employees in the process of experimentation (t(79) = 14.112, p<0.05);

❖ Have time for the innovation process (t(78) = 12.129, p<0.05);

❖ Have business policies that allow employees to be freely innovative (t(79) = 8.742, p<0.05);

❖ Have ongoing communication between the manager(s) and employees on problem solving (t(79) = 19.712, p<0.05); and

❖ Give rewards (for example praise, promotions, etc.) for innovative practice (t(79) = 12.613, p<0.05).

Having discussed the innovative processes at the businesses, the following section presents the descriptive statistics on the extent of the physical environment's influence on operational performance of SMEs.

4.6 Descriptive statistics on the extent of the physical environment's influence on operational performance of SMEs

This section presents and analyses the results related to the business location that allows for productive trading, the distance between the business location and the raw material supplies. Moreover, it presents and analyses the location that allows a business to use the suppliers of their choice, the ease of access to the business location by customers and the business' internet connection. Lastly, it presents and analyses the business' ready access to main roads, the availability of electricity in the business and the business access to telecommunication services.

Having introduced the section, the following subsections, which are mentioned in the section above, will be discussed. The one-sample statistics and its test on the extent of physical environment's influence on operational performance for SME will conclude this section.

4.6.1 The business location that allows for productive trading

Table 4.57 presents and analyses the percentage results of the business location that allows for productive trading.

Table 4.57: Business location that allows for productive trading

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	4	5.0	5.0	5.0
	Agree	40	50.0	50.0	55.0
	Strongly agree	36	45.0	45.0	100.0
	Total	80	100.0	100.0	

Table 4.57 shows that 95.0 percent of participants agree and 5.0 percent are neutral that their businesses' locations allow for productive dealings. This is contradictory to

the findings of Okpara and Kabongo (2009: 8) that numerous SMEs in African countries function in an unfavourable environment.

4.6.2 The distance between the business location and raw material supplies

Table 4.58 presents and analyses the percentage results of the location of the business to raw material supplies.

Table 4.58: Location to raw material supplies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	6	7.5	7.5	7.5
	Neutral	4	5.0	5.0	12.5
	Agree	33	41.3	41.3	53.8
	Strongly agree	37	46.3	46.3	100.0
	Total	80	100.0	100.0	

Table 4.58 indicates that 87.6 percent of participants agree that they are closely located to raw material supplies, while 5.0 percent are neutral and 7.5 percent disagree.

4.6.3 The location that allows the business to use the suppliers of their choice

Table 4.59 presents and analyses the percentage results on the location that allows the business to use the suppliers of their choice.

Table 4.59: Location which allows the business to use the suppliers of choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2.5	2.5	2.5
	Neutral	5	6.3	6.3	8.9
	Agree	36	45.0	45.6	54.4
	Strongly agree	36	45.0	45.6	100.0
	Total	79	98.8	100.0	
Missing	System	1	1.3		
Total		80	100.0		

Table 4.59 shows that 90 percent of participants agree that their business location allows them to use the suppliers of their choice, while 6.3 percent are neutral and 2.5 percent disagree.

4.6.4 Ease of access to the business location by customers

Table 4.60 presents and analyses the percentage results regarding ease of access for customers to the location of the business.

Table 4.60: The location of the business in terms of ease of access for customers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Neutral	4	5.0	5.0	6.3
	Agree	37	46.3	46.3	52.5
	Strongly agree	38	47.5	47.5	100.0
	Total	80	100.0	100.0	

Table 4.60 indicates that 93.8 percent of participants agree that the location of their businesses makes it easy for their customers to reach them, while 5.0 percent are neutral and 1.3 percent disagrees.

4.6.5 The business internet connection

Table 4.61 presents and analyses the percentage results of the business internet connection.

Table 4.61: Internet connection

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.3	1.3	1.3
	Disagree	3	3.8	3.8	5.0
	Neutral	3	3.8	3.8	8.8
	Agree	29	36.3	36.3	45.0
	Strongly agree	44	55.0	55.0	100.0
	Total	80	100.0	100.0	

Table 4.61 indicates that 91.3 percent of the total participants agree that they are connected to the internet, while 3.8 percent are neutral and 5.1 percent disagree. This

result shows that the majority of SMEs in this study in the textile and clothing industry are connected to the internet. This is in line with the findings made by Stevens, Loudon and Cole (2002: 75) that small businesses use internet for their daily operations.

4.6.6 Ready access to main roads by the business

Table 4.62 presents and analyses the percentage results of the ready access to main roads by the business.

Table 4.62: Ready access to main roads by the business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Neutral	3	3.8	3.8	5.1
	Agree	31	38.8	39.2	44.3
	Strongly agree	44	55.0	55.7	100.0
	Total	79	98.8	100.0	
Missing System		1	1.3		
Total		80	100.0		

Table 4.62 shows that 93.8 percent of participants agree that they have ready access to main roads, while 3.8 percent are neutral and 1.3 percent disagree. These results show that the majority of SMEs in the textile and clothing industry have access to main roads. This is in line with the findings made by Cornish and Mugova (2014: 135) that roads are vital to a business to competently run its business.

4.6.7 The availability of electricity in the business

Table 4.63 presents and analyses the percentage results of the availability of electricity in the business.

Table 4.63: The availability of electricity in the business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.3	1.3	1.3
	Neutral	1	1.3	1.3	2.5
	Agree	30	37.5	37.5	40.0
	Strongly agree	48	60.0	60.0	100.0
	Total	80	100.0	100.0	

Table 4.63 indicates that 97.5 percent of participants agree that they have electricity in their businesses, while 1.3 percent are neutral and 1.3 percent disagree.

4.6.8 Business access to telecommunication services

Table 4.64 presents and analyses the percentage results of the business access to telecommunication services.

Table 4.64: Access to telecommunication services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	1.3	1.3	1.3
	Disagree	1	1.3	1.3	2.5
	Neutral	2	2.5	2.5	5.0
	Agree	30	37.5	37.5	42.5
	Strongly agree	46	57.5	57.5	100.0
	Total	80	100.0	100.0	

Table 4.64 shows that 95.0 percent of participants agree that they have access to telecommunication services in their business, while 2.5 percent are neutral and 2.6 percent disagree.

The following subsection presents the one-sample statistics on the extent of the physical environment's influence on operational performance for SMEs.

4.6.9 One-sample statistics on the extent of the physical environment's influence on operational performance of SMEs

Table 4.65 presents and analyses the mean value results of the one-sample statistics on the extent of the physical environment's influence on operational performance of SMEs.

Table 4.65: One-sample statistics on the extent of the physical environment's influence

	N	Mean	Std. Deviation	Std. Error Mean
1.0 Our business location allows for productive dealings	80	4.40	0.587	0.066
2.0 We are closely located to the raw material supplies	80	4.26	0.868	0.097
3.0 Our business location allows us to use the suppliers of our choice	79	4.34	0.714	0.080
4.0 The location of our business makes it easy for our customers to reach us	80	4.40	0.648	0.072
5.0 We are connected to the internet	80	4.40	0.836	0.093
6.0 We have ready access to main roads	79	4.49	0.638	0.072
7.0 We have electricity in our business	80	4.56	0.592	0.066
8.0 We have access to telecommunication services in our business	80	4.49	0.729	0.082

Table 4.65 shows that the mean value of all the statements are greater than three (>3). This implies that there is significant agreement on:

- ❖ The business location allows for productive dealings (4.40);
- ❖ Location close to raw material supplies (4.26);
- ❖ The business location allows the use of suppliers of choice (4.34);
- ❖ The location of the business is easy for the customers to reach (4.40);
- ❖ Connection to the internet (4.40);

- ❖ Ready access to main roads (4.49);
- ❖ Having electricity in the business (4.56); and
- ❖ Having access to telecommunication services in the business (4.49).

The statements are all presented in Figure 4.7 using the average score.
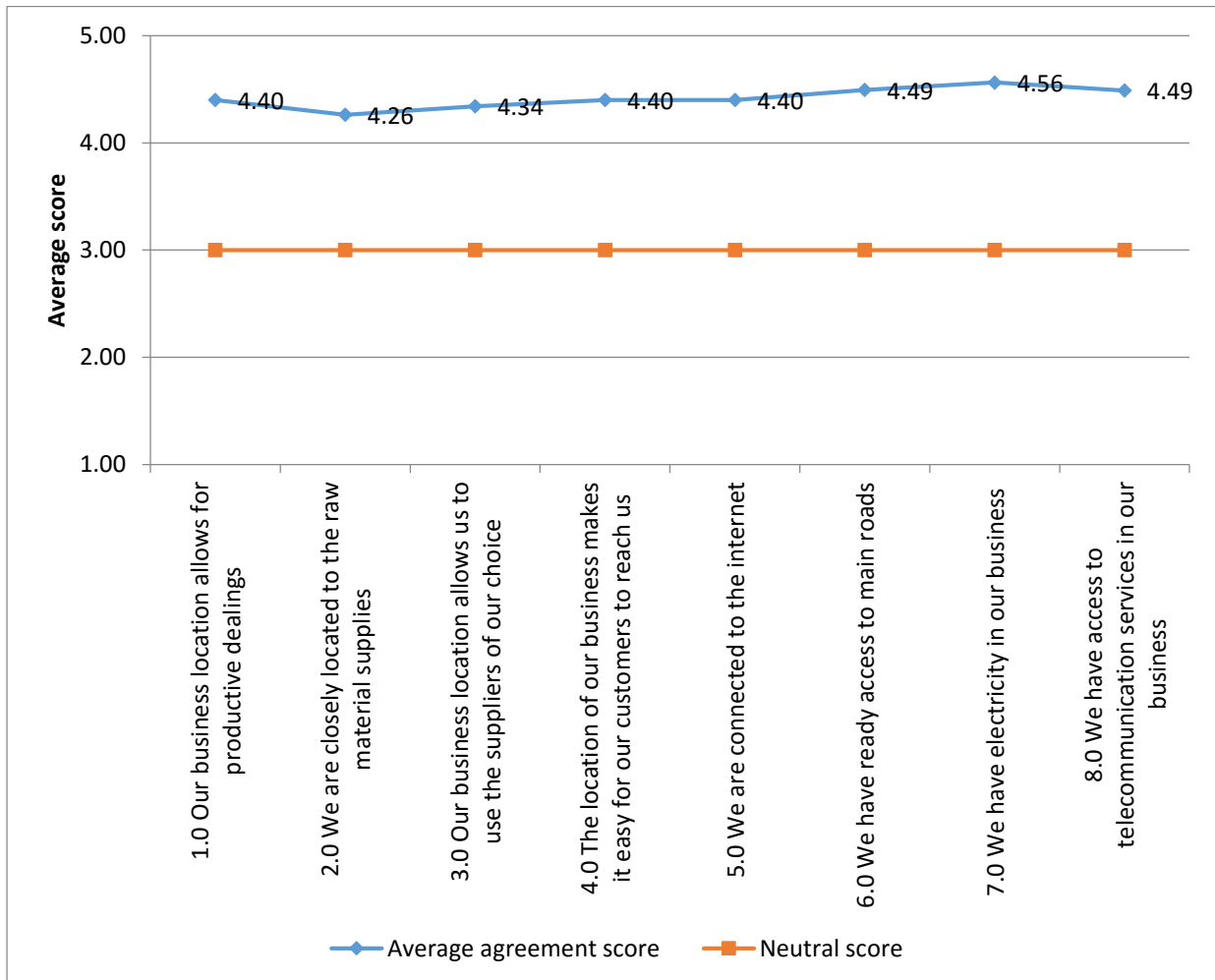
Figure 4.7: The average score on the extent of physical environment

Figure 4.7 indicates that the average agreement score is between 4.00 and 5.00. The neutral score averages at 3.00. The mean value of all the statements is greater than three (>3), with the highest being 4.56 and the lowest being 4.26. As mentioned earlier, this implies significant agreement on all the statements.

The following subsection presents the one-sample test of the extent of the physical environment's influence on operational performance of SMEs.

4.6.10 One-sample test of the extent of the physical environment's influence on operational performance of SMEs

Table 4.66 presents and analyses the significant value results on the one-sample test of the extent of the physical environment's influence on operational performance of SMEs.

Table 4.66: One-sample test of the extent of the physical environment's influence

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
1.0 Our business location allows for productive dealings	21.340	79	0.000	1.400	1.27	1.53
2.0 We are closely located to the raw material supplies	13.013	79	0.000	1.263	1.07	1.46
3.0 Our business location allows us to use the suppliers of our choice	16.701	78	0.000	1.342	1.18	1.50
4.0 The location of our business makes it easy for our customers to reach us	19.316	79	0.000	1.400	1.26	1.54
5.0 We are connected to the internet	14.980	79	0.000	1.400	1.21	1.59
6.0 We have ready access to main roads	20.810	78	0.000	1.494	1.35	1.64
7.0 We have electricity in our business	23.607	79	0.000	1.563	1.43	1.69
8.0 We have access to telecommunication services in our business	18.250	79	0.000	1.487	1.33	1.65

Table 4.66 shows that there is significant agreement on all the statements. This suggests that there is enough evidence that the physical environment of SMEs:

❖ Allows for productive dealings (t(79) = 21.340, p<0.05);

- ❖ Allows the business to be closely located to the raw material supplies ($t(79) = 13.013$, $p<0.05$);
- ❖ Allows the business to use the suppliers of their choice ($t(78) = 16.701$, $p<0.05$);
- ❖ Makes it easy for customers to reach the enterprise ($t(79) = 19.316$, $p<0.05$);
- ❖ Allows connection to the internet ($t(79) = 14.980$, $p<0.05$);
- ❖ Allows ready access to main roads ($t(78) = 20.810$, $p<0.05$);
- ❖ Have electricity ($t(79) = 23.607$, $p<0.05$); and
- ❖ Have access to telecommunication services ($t(79) = 18.250$, $p<0.05$).

Having discussed the results of the extent of physical environment's influence on operational performance for SME, the following section presents the correlation tests.

4.7 Pearson's correlation tests

The Pearson's correlation will be used to analyse the scores of variables. These include innovative processes and operational performance, as well as the extent of the influence of the physical environment and operational performance. Firstly, the correlation will be done on all the statements between innovative processes and operational performance, as well as the extent of the physical environment's influence and operational performance. After that, a correlation will be done on the above mentioned objectives as a whole.

The Pearson's correlation coefficient is a measure of the strength of direct relationship between two variables and is signified by r (Laerd Statistics 2013), and ranges from -1.0 to +1.0. The relationship becomes stronger (that is, both positive and negative) when the values are nearer to ±1, and the relationship becomes weaker when the values are nearer to 0 (Dawson 2009).

A value of zero (0) shows that there is no relationship between the two variables, a value above zero (0) shows a positive relationship (that is, as the value of one variables increases, so does the value of the other variable) and a value below zero (0) shows a negative relationship (that is, as the value of one variable increases, the value of the other variable decreases) (Laerd Statistics 2013).

The strength of the correlation will be described in terms of the total value of r, which is:
- ❖ 0.00-0.19, very weak;

❖ 0.20- 0.39, weak;

❖ 0.40-0.59, medium;

❖ 0.60-0.79, strong;

❖ 0.80-1.0, very strong (Dawson 2009).

The outcomes specify the following outlines: positive values show a directly relative connection between the variables and a negative value shows an opposite connection.

Having introduced this section, the following subsections present the correlation between innovative processes and operational performance of the business.

4.7.1 Correlation between innovative processes and operational performance

Table 4.67 presents and analyses the results on the correlation between the statements on innovative processes and operational performance.

Table 4.67: Correlation between the statements on innovative processes and operational performance

		1.0 Problems are investigated before working on improvements	2.0 The need to improve processes through innovation is identified	3.0 Risks are taken in order to have positive impact on improvement processes	4.0 The manner in which things are done motivates our employees to be innovative	5.0 Our work environment supports innovative processs which allows employees to gain respect among themselves	6.0 Financial resources are assigned to support innovative process	7.0 Our work settings allows for innovative process	8.0 The innovative process is tested before implementation	9.0 Employees are involved in the process experimentation	10.0 There is time for innovative process	11.0 Business policies allow employees to be freely innovative	12.0 There is ongoing communication between the manager(s) and employees on problem solving	13.0 Rewards (e.g. praise, promotions, etc.) are given for innovative practise
1.0 Operators work within a set of standard times to perform a task	Pearson Correlation	-0.043	0.238*	0.058	0.075	0.080	0.011	0.132	0.089	0.209	0.204	0.098	0.179	0.144
	Sig. (2-tailed)	0.703	0.034	0.611	0.511	0.481	0.924	0.243	0.432	0.062	0.071	0.387	0.111	0.202
	N	80	80	79	80	80	80	80	80	80	79	80	80	80
2.0 There are measurable goals to measure the reliability of a product for customer usage	Pearson Correlation	0.110	0.238*	0.262*	0.119	0.339**	0.020	0.149	0.053	-0.030	0.095	-0.078	0.232*	0.203
	Sig. (2-tailed)	0.330	0.033	0.020	0.295	0.002	0.862	0.188	0.640	0.792	0.404	0.491	0.038	0.071
	N	80	80	79	80	80	80	80	80	80	79	80	80	80
3.0 Standards to measure the quality of a product are monitored	Pearson Correlation	0.016	0.115	0.019	0.092	0.247*	-0.047	0.067	0.080	0.048	-0.025	0.111	0.146	0.125
	Sig. (2-tailed)	0.889	0.315	0.867	0.418	0.029	0.684	0.560	0.483	0.677	0.827	0.328	0.198	0.273
	N	79	79	78	79	79	79	79	79	79	78	79	79	79

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4.0 There are a set of measurements to monitor how often the business sells and replaces its inventory	Pearson Correlation	0.072	0.055	0.151	0.128	0.343**	0.111	0.086	0.179	0.170	0.043	0.092	0.152	0.188
	Sig. (2-tailed)	0.526	0.626	0.184	0.257	0.002	0.326	0.450	0.113	0.131	0.704	0.416	0.179	0.095
	N	80	80	79	80	80	80	80	80	80	79	80	80	80
5.0 There are labour indices for examining expenses in order to take business decisions	Pearson Correlation	-0.041	0.086	-0.051	0.088	0.179	0.050	0.022	0.081	-0.080	-0.022	0.072	0.139	0.151
	Sig. (2-tailed)	0.718	0.452	0.655	0.443	0.115	0.659	0.850	0.478	0.485	0.845	0.526	0.223	0.185
	N	79	79	78	79	79	79	79	79	79	78	79	79	79
6.0 Just-In-Time system, which ensures that the customer is supplied with the product they want on time and in the correct quantity, is applied in the business	Pearson Correlation	-0.133	0.173	0.141	0.121	0.187	0.108	0.148	0.102	0.042	0.149	0.073	0.159	0.197
	Sig. (2-tailed)	0.241	0.125	0.214	0.285	0.097	0.341	0.190	0.368	0.710	0.191	0.519	0.159	0.080
	N	80	80	79	80	80	80	80	80	80	79	80	80	80

+++A (*) correlation is significant at the 0.05 level (2-tailed). A correlation (**) is significant at the 0.01 level (2-tailed).

1. There is a positive significant correlation between a set of standard times to perform a task and identifying a need to improve processes through innovation at a significant coefficient r-value of 0.238*. The two variables have a p-value of 0.034 which is less than 0.05. This indicates a weak correlation between variables, and explains that standard times are a significant factor in improving process through innovation.

2. A positive significant correlation between the measurable goals to measure the reliability of a product for customer usage and identifying a need to improve processes through innovation is identified at a significant coefficient r-value of 0.238*. These variables have a p-value of 0.033 which is less than 0.05. This show a weak correlation between variables, which signifies measuring the reliability of a product is a significant factor in improving processes through innovation.

3. The variable of measurable goals to measure the reliability of a product for customer usage and the variable of taking risks in order to have positive impact on

improvement processes have a significant coefficient r-value of 0.262*. The two variables have a p-value of 0.020 which is less than 0.05. This specifies a correlation that is weak between variables, which implies measuring the reliability of a product is a significant factor in taking risks in the business.

4. A positive significant correlation between measurable goals to measure the reliability of a product for customer usage and a work environment that supports innovative processes is identified at a significant coefficient r-value of 0.339**. These variables have a p-value of 0.002 which is less than 0.05. This indicate a weak correlation between variables, which suggests measuring the reliability of a product is a significant factor in a work environment which supports innovative processes.

5. There is a positive significant correlation between monitoring the standards to measure the quality of a product and a work environment that supports innovative processes at a significant coefficient r-value of 0.247*. The two variables have a p-value of 0.029 which is less than 0.05. This shows a weak correlation between variables, which infers standards to measure the quality of a product are a significant factor in a work environment which supports innovative processes.

6. The variable of measurements to monitor how often the business sells and replaces its inventory and the variable of work environment that supports innovative process is identified at a significant coefficient r-value of 0.343**. These variables have a p-value of 0.002 which is less than 0.05. This indicates a weak correlation between variables, and explains that the management of inventory is a significant factor in a work environment which supports innovative processes.

7. There is a positive significant correlation between the measurable goals to measure the reliability of a product for customer usage and the ongoing communication between the manager(s) and employees on problem solving at a significant coefficient r-value of 0.232*. The two variables have a p-value of 0.038 which is less than 0.05. This show a weak correlation between variables, and explains that measuring the reliability of a product is a significant factor in manager and employee communication.

8. The variable of operators working within a set of standard times to perform task and the variable of investigating problems before working on improvements have a p-value of 0.703, which is more than 0.05. The variables do not statistically have a significant correlation.

9. The variable of labour indices for examining expenses in order to take business decisions and the variable of assigning financial resources to support innovative process have a p-value of 0.659, which is more than 0.05. The variables do not statistically have a significant correlation.

10. The variable of applying JIT systems in the business and the variable of having time for innovative process have a p-value of 0.191, which is more than 0.05. The variables do not statistically have a significant correlation.

11. There is a negative significant correlation between the investigation of problems before working on improvements and having a set of standard times to perform a task at a significant coefficient r-value of -0.043. The two variables have a p-value of 0.703 which is above 0.05. This shows a strong negative correlation between variables, and explains that investigating of problems is not a significant factor in operators working within set of standard times to perform a task.

12. There is a negative significant correlation between the involvement of employees in the process of experimentation and measurable goals to measure the reliability of a product for customer usage at a significant coefficient r-value of -0.030. The two variables have a p-value of 0.792 which is above 0.05. This shows a strong negative correlation between variables, and explains that the involvement of employees in the process experimentation is not a significant factor in measuring the reliability of a product.

13. There is a negative significant correlation between assigning financial resources to support innovative process and monitoring standards to measure the quality of a product at a significant coefficient r-value of -0.047. The two variables have a p-value of 0.684 which is above 0.05. This show a strong negative correlation between variables, and explains that assigning financial resources to support innovative process is not a significant factor in monitoring standards to measure the quality of a product.

Table 4.68 presents the results of the correlation between the two objectives of innovative processes and operational performance.

Table 4.68: Correlation between innovative processes and operational performance

		OperPerf	InnProc
OperPerf	Pearson Correlation	1	0.193
	Sig. (2-tailed)		0.087
	N	80	80
InnProc	Pearson Correlation	0.193	1
	Sig. (2-tailed)	0.087	
	N	80	80

+++A (*) correlation is significant at the 0.05 level (2-tailed). A correlation (**) is significant at the 0.01 level (2-tailed).

Table 4.68 shows that there is no significant correlation between innovative processes and operational performance.

Having discussed the correlation between innovative processes and operational performance, the following subsection presents the correlation between the extent of the physical environment' influence and operational performance.

4.7.2 Correlation between the extent of the physical environment's influence and operational performance

This section applies Pearson's correlation to see if there is a correlation between the statements on the physical environment's influence and operational performance.

Having introduced the subsection, Table 4.69 presents and analyses the results of the correlation between the statements on physical environment's influence and operational performance.

Table 4.69: Correlation between the statements on the physical environment's influence and operational performance

		1.0 Our business location allows for productive dealings	2.0 We are closely located to the raw material supplies	3.0 Our business location allows us to use the suppliers of our choice	4.0 The location of our business makes it easy for our customers to reach us	5.0 We are connected to the internet	6.0 We have ready access to main roads	7.0 We have electricity in our business	8.0 We have access to telecommunication services in our business
1.0 Operators work within a set of standard times to perform a task	Pearson Correlation	0.023	0.308**	0.152	0.099	0.178	0.053	0.084	0.056
	Sig. (2-tailed)	0.839	0.005	0.181	0.382	0.115	0.644	0.460	0.622
	N	80	80	79	80	80	79	80	80
2.0 There are measurable goals to measure the reliability of a product for customer usage	Pearson Correlation	0.084	0.060	0.299**	0.164	0.105	0.122	0.175	0.118
	Sig. (2-tailed)	0.457	0.597	0.007	0.145	0.355	0.283	0.121	0.298
	N	80	80	79	80	80	79	80	80
3.0 Standards to measure the quality of a product are monitored	Pearson Correlation	-0.062	0.049	0.044	0.036	0.075	0.078	0.135	0.069
	Sig. (2-tailed)	0.587	0.670	0.702	0.755	0.511	0.496	0.236	0.545
	N	79	79	78	79	79	78	79	79
4.0 There are a set of measurements to monitor how often the business sells and replaces its inventory	Pearson Correlation	-0.056	0.050	0.126	0.228*	0.118	0.090	0.156	0.042
	Sig. (2-tailed)	0.621	0.661	0.270	0.042	0.297	0.430	0.166	0.709
	N	80	80	79	80	80	79	80	80
5.0 There are labour indices for examining	Pearson Correlation	0.074	0.103	0.084	0.168	0.143	0.103	0.129	0.177
	Sig. (2-tailed)	0.517	0.366	0.467	0.139	0.208	0.371	0.256	0.118

expenses in order to take business decisions	N	79	79	78	79	79	78	79	79
6.0 Just-In-Time system, which ensures that the customer is supplied with the product they want on time and in the correct quantity, is applied in the business	Pearson Correlation	0.247*	0.153	0.353**	0.351**	0.174	0.198	0.251*	0.316**
	Sig. (2-tailed)	0.027	0.177	0.001	0.001	0.124	0.081	0.024	0.004
	N	80	80	79	80	80	79	80	80

+++A (*) correlation is significant at the 0.05 level (2-tailed). A correlation (**) is significant at the 0.01 level (2-tailed).

1. There is a positive significant correlation between working within a set of standard times to perform a task and being closely located to the raw material supplies at a significant coefficient r-value of 0.308**. These variables have a p-value of 0.005 which is less than 0.05. This indicates a weak correlation between variables, and indicates that standard times to perform a task is a significant factor in being closely located to the raw material supplies.

2. A positive significant correlation between measurable goals to measure the reliability of a product for customer usage and the business location that allows suppliers of choice is identified at a significant coefficient r-value of 0.299**. The two variables have a p-value of 0.007 which is less than 0.05. This shows a very weak correlation between variables, and specifies that measuring the reliability of a product is a significant factor in business location which allows use of suppliers of choice.

3. The variable of a set of measurements to monitor how often the business sells and replaces its inventory and the variable of the location of the business which makes it easy for the customers to reach is identified at a significant coefficient r-value of 0.228*. These variables have a p-value of 0.042 which is less than 0.05. This indicates a medium correlation between variables, and explains that management of inventory is a significant factor in the ease of access to the business location.

4. A positive significant correlation between application of a JIT system in the business and the business location that allows for productive dealings is identified at a significant coefficient r-value of 0.247*. The two variables have a p-value of 0.027 which is less than 0.05. This reveals a weak correlation between variables, and specifies that applying a JIT system is a significant factor in productive dealings.

5. There is a positive significant correlation between applying a JIT system in the business and the business location that allows use of suppliers of our choice at a significant coefficient r-value of 0.353**. These variables have a p-value of 0.001 which is less than 0.05. This show a weak correlation between variables, and explains that applying a JIT system is a significant factor in using the suppliers of choice.

6. The variable of applying a JIT system in the business and the variable of the business location which makes it easy for customers to reach is identified at a significant coefficient r-value of 0.351**. The two variables have a p-value of 0.001 which is less than 0.05. This indicates a very weak correlation between variables, and states that applying JIT is a significant factor in the ease of access to the business.

7. There is a positive significant correlation between applying a JIT system in the business and the availability of electricity in the business at a significant coefficient r-value of 0.251*. These variables have a p-value of 0.024 which is less than 0.05. This show a weak correlation between variables, and explains that applying a JIT system is a significant factor in the availability of electricity in the business.

8. A positive significant correlation between applying a JIT system in the business and access to telecommunication services in the business is identified at a significant coefficient r-value of 0.316**. The two variables have a p-value of 0.004 which is less than 0.05. This indicates a weak correlation between variables, and states that applying a JIT system is a significant factor in the availability of telecommunication services in the business.

9. The variable of monitoring standards to measure the quality of a product and the variable of ready access to main roads have a p-value of 0.496, which is more than 0.05. These variables do not statistically have a significant correlation.

10. The variable of labour indices for examining expenses in order to take business decisions and the variable of access to telecommunication services in the business

have a p-value of 0.118, which is more than 0.05. The variables do not statistically have a significant correlation.

11. The variable of operators work within a set of standard times to perform a task and the variable of the location of our business allows for productive dealings have a p-value of 0.839, which is more than 0.05. The variables do not statistically have a significant correlation.

12. There is a negative significant correlation between a business location which allows for productive dealings and monitoring the standards to measure the quality of a product at a significant coefficient r-value of -0.062. The two variables have a p-value of 0.587 which is above 0.05. This indicate a medium negative correlation between variables, and states that having a business location which allows for productive dealings is not a significant factor in monitoring standards to measure the quality of a product.

13. There is negative significant correlation between a set of measurements to monitor how often the business sells and replaces its inventory and having a business location that allows for productive dealings, at a significant coefficient r-value of -0.056. The two variables have a p-value of 0.621 which is above 0.05. This indicates a strong negative correlation between variables, and states that managing inventory is not a significant factor in having a business location that allows for productive dealings.

Table 4.70 presents the results of a correlation between the objectives of the physical environment's influence and operational performance.

Table 4.70: Correlation between the physical environment's influence and operational performance

		OperPerf	PhysEnv
OperPerf	Pearson Correlation	1	0.229*
	Sig. (2-tailed)		0.041
	N	80	80
PhysEnv	Pearson Correlation	0.229*	1
	Sig. (2-tailed)	0.041	
	N	80	80

+++A (*) correlation is significant at the 0.05 level (2-tailed). A correlation (**) is significant at the 0.01 level (2-tailed)

Table 4.70 shows that there is a significant positive correlation between physical environment and operational performance at a significant coefficient r-value of 0.229*. These objectives have a p-value of 0.041 which is less than 0.05. This show a medium correlation between the objectives, which means the physical environment's influence is a significant factor in operational performance of the business.

Having discussed the correlation between the physical environment's influence and operational performance of the business, the following section presents reliability of the test.

4.8 Reliability of test

Reliability is the degree to which the indicator or test is a consistent measure over time, or simply, as to whether the respondents give the same responses at a different time (David and Sutton 2011: 266). Cronbach's Alpha was used as a tool to measure the reliability of the questionnaire. The score of the reliability is presented and analysed in Table 4.71.

Table 4.71: Cronbach's Alpha test

	Cronbach's Alpha	N of Items
Operational Performance	0.842	6
Innovative Process	0.928	13
The extent of Physical Environment	0.926	8

Table 4.71 shows that the value of alpha is greater than zero point seven (>0.7) for the objectives. This indicates that there is internal consistency and that the grouped measure is a reliable one for operational performance, innovative process and the extent of the physical environment's influence.

Having discussed the reliability of test, the following section presents the conclusion of this chapter.

4.9   Conclusion

This chapter presented and analysed the profiles of the participants and the descriptive statistics related to the objectives of the study. The one-sample statistics and its test, aggregate score, as well as the binomial test concluded the results in each section discussed. Moreover, a correlation was done on the innovative processes and operational performance, as well as the extent of the physical environment's influence and operational performance. Lastly, it presented and analysed the results of reliability test using Cronbach's Alpha.

In the following chapter, the conclusions and recommendations arising from the data collected, according to the objectives of this study, will be discussed.

CHAPTER 5 : CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The preceding chapter concentrated on the analysis and interpretation of the results. For this study to draw conclusions and make recommendations it was necessary for the data to be analysed. Moreover, the data analysis allowed for the achievements of the objectives of the study which are to assess whether the awareness of GFIS influences operational performance of SMEs, whether innovative processes influence the operational performance of SMEs and whether the extent of the physical environment influences operational performance of SMEs. The results were presented in tables and graphs and discussed in relation to the responses of the participants who were all SME owners in the textile and clothing industry in the eThekwini district.

This chapter explains how the aim and objectives of the study were achieved. It discusses the empirical nature of the study, achievements of the study objectives, implications of the results, limitations and recommendation for future studies.

5.2 Empirical nature of the study

An empirical study is based on experimental and assessed occurrences and develops facts from authentic experience as opposed to philosophy or belief (Cahoy 2016). This study followed deductive logic. According to Sekaran and Bougie (2013: 26) deductive logic is a vital component in the hypothetico-deductive technique. The hypothetico-deductive technique comprises the seven phases of classifying a broad problem area, namely: describing the problem statement, theorising, determining measures, gathering of data, analysis of data, and the interpretation of the results. Deductive logic commences with a broad concept and then applies this concept to a detailed instance.

The following are the stages applied in carrying out the research.

5.2.1 Planning and framing

The likelihood of achievement of a study project is significantly improved when the beginning is properly defined as a detailed proclamation of objectives and justification (Congdon and Dunham 1999: 1). The researcher went to seda offices situated in the

eThekwini CBD and the Berea areas seeking SMME databases for textile and clothing businesses. The seda that is based in the eThekwini CBD provided the researcher with three enterprises in the textile and clothing industry. The researcher then approached the dti, eThekwini Business Unit and NYDA in Durban seeking the same information but without success. However, the eThekwini Business Unit later emailed the questionnaire to the textile and clothing SMMEs that they had in their database. A single participant completed the questionnaire.

Lastly, the researcher approached Statistics SA, through email, requesting their database of SMMEs in textile and clothing industry, which they provided.

Interacting with the SMME agencies allowed the researcher to identify some of the factors affecting the growth of the SMMEs. These factors include lack of awareness to SMME financial incentive schemes, their operational performance and the physical environment wherein they operate. Moreover, the literature review helped the researcher identify the broader context of the problems facing SMMEs.

5.2.2 Gathering and recording secondary data

The researcher gathered data from journals and books in relation to the objectives of the study. This data was collected from the library and online using subject/research guides and databases. After arranging the data accordingly, the researcher was able to derive questions from the data so as to develop a questionnaire.

5.2.3 SME recruitment process and data collection method

Two research assistants helped the researcher in distributing and retrieving the questionnaires. The questionnaires were distributed to the SMEs through email and hand delivery. The researcher and the research assistants retrieved the completed questionnaires through hand collection and email.

5.2.4 Analysis of data and interpreting study results

The study was descriptive and conclusive in nature. Data was coded and results presented in standardised tables for analysis.

5.2.5 The written report

The vital aim of any study report is to provide an explanation of what has been completed in the numerous phases of the study process (Sekaran and Bougie 2013: 335). The study was organised in chapters. Chapter 1 introduced the research, Chapter 2 discussed the literature guided by the objectives of the study, Chapter 3 presented the research methodology, Chapter 4 analysed and interpreted the data, and Chapter 5 concluded and made recommendations.

5.3 Achievements of the study objectives

The research was guided by the objectives of this study. As a result, this section briefly explains how the study objectives were achieved.

Objective 1: to examine if the awareness of government financial incentives influences operational performance of SMEs

Mathibe and Van Zyl (2011: 101) state that a number of SMMEs are not aware of government financial incentives and less knowledgeable as to where to access finance. The finding in this study indicated that 52 percent of SMEs claim to be aware of the GFIS. However, 52 percent is not enough for a government who perceives SMEs as agents of employment promotion, redistribution, and improvement in global competitiveness. It has been, time and again, emphasised how important SMEs are in the economy of any country, and that when they are well nurtured they can boost the economy of a country.

Rogerson (2010: 775) states that the unmanageable administrative processes alongside the constant variations in schemes discourage SMMEs from applying for assistance to obtainable schemes. They are further discouraged by the high search costs imposed on SMME owners to access such services. The findings of this study concur with Rogerson's statement. Only 46 percent of SME owners know how to access the government financial incentive scheme. Moreover, the results of the binomial tests indicate that a significant majority of SMEs have not accessed PI at 0.018, SSAS at 0.018, MIP at 0.010 and IWF at 0.000. They are all below the conversion standard p value of 0.05.

Furthermore, the binomial tests indicate that a significant majority of SMEs in the textile and clothing industry are not supported by BBSDP at 0.000, PI at 0.000, SSAS

at 0.000, MIP at 0.000 and IWF at 0.000. They are all below the conversion standard p value of 0.05. However, Rogerson (2010: 775) argues that lack of support services is not the main issue. The main issue is the uneven spread of where, how and in which fields services are offered. Thus, it is unsurprising that only 18 percent of SMEs are supported by any of the government financial incentives.

The one-sample statistics on whether the GFIS fulfils the business objective(s) indicate that the mean value of the statement is greater than (>3) significant agreement with the statement. Therefore, most of the SMEs agree that the GFIS fulfils the business objective(s).

The one-sample statistic on the effect of using the GFIS shows that the mean value of the statement is greater than three (>3) which implies significant agreement with the statement. Therefore, most of the SMEs agree that there is a positive influence as a result of using the GFIS.

Objective 2: to evaluate if innovative processes influence the operational performance of SMEs

The results show that the majority of SMEs (91 percent) investigate problems before working on improvements. Moreover, 84 percent of SME owners agreed that the manner in which things are done in their businesses motivates their employees to be innovative. The findings concur with Huddleston (2014: 51) that businesses should allow workers to be included when it comes to making decisions and taking risks.

There is a good relationship between the owner/manager and employees in SMEs. This is demonstrated through the response of 95 percent SME owners who engaged in ongoing communication with employees on problem solving. This concurs with Stefanovska-Petkovska *et al.* (2015: 75) who states that distributing the power of making decisions to employees can lead to enhanced performance, work gratification and a constructive impact on employee welfare and psychological health, intrinsic motivation and self-confidence. Moreover, communication between management and employee is significant for creating a tradition of clearness between the two (Mishra *et al.* 2014: 183).

According to Chomal and Baruah (2014: 53) employees' performance is enhanced through rewards which encourage them to be at their best. In this study, 78 percent of

SME owners agreed with offering rewards (for instance, praise, promotions, etc.) to their employees for innovative practises.

Of the SME owners, 74 percent agreed with taking risks in order to have positive impact on improvement processes. Risk-taking is a major feature of being a businessperson (Ten top tips for SME success 2014: 15). However, Gilmore, Carson and O'Donnell (2004: 349) argue that the high failure rates of small businesses are caused by a strong link between small business owner-managers and risk.

The majority of SME owners (88 percent) agree that their employees are involved in the process of experimentation. This finding opposes the statement made by Andries and Czarnitzki (2014: 21) that SMMEs tend to mainly rely on the owner's personal understanding for evolving innovations.

The one-sample test for innovative processes in SMEs indicated that there are significant agreements on all the innovative process statements. This means that SMEs apply innovative processes in their business.

The correlation between innovative processes and operational performance indicates that there is no significant correlation between the two objectives when taken as a single measure. Thus, the application of innovative processes does not influence the operational performance of the SMEs in the textile and clothing industry in the eThekwini district.

Objective 3: to investigate if the extent of physical environment influences operational performance for SMEs

Regarding the objective relating to the extent of the physical environment's influence, 95 percent of SME owners agreed that their enterprise location allows for productive dealings. This concurs with the statement made by Oksanen and Stahle (2013: 816) that a perfect operational environment inspires and allows productive dealings, and the statement by Van Wyk *et al.* (2004: 259) that SA has an exceptional business environment particularly the infrastructure, legal system, natural and human resources, telecommunication network and financial services.

Approximately 91 percent of SMEs are connected to the internet. This concurs with the statement made by Stanciu and Tinca (2014: 740) that the internet has turned out to be a daily necessity in the life of a number of individuals.

Bowen *et al.* (2009: 16) state that infrastructure, as it relates to the provision of access to roads, sufficient power, water, sewerage and telecommunication services, poses a critical test to SMMEs. Moreover, poor or insufficient infrastructure interrupts SMME development. This study shows that a resounding 95 percent of SMEs have ready access to main roads, 98 percent have electricity usage and 95 percent have access to telecommunication services. Thus SMEs development is not interrupted by the lack of road, electricity and telecommunication services.

The one-sample statistics on the extent of the physical environment's influence on operational performance for SMEs indicate that SMEs in the textile and clothing industry that are based in eThekwini district have a favourable physical environment. This finding contradicts the statement made by Okpara and Kabongo (2009: 8) that numerous SMEs in African countries function in unfavourable settings.

When looking at the correlation (that is, the single measure) of the extent of the physical environment's influence and operational performance, a significant positive correlation between the two at a significant coefficient r-value of 0.229 was achieved. These objectives have a P-value of 0.041 which is less than 0.05. This show a weak correlation between the objectives. Therefore, the extent of the physical environment's influence is a significant factor in operational performance of the business. This finding is in accord with the statement made by Oksanen and Stahle (2013: 816) that a perfect operational environment inspires and allows productive dealings between diverse actors.

5.4   Implications of the results

This section presents the circumstances relating to SMEs' awareness of GFIS, their innovative processes and the extent of the physical environment's influence. It is linked to the study results presented in Chapter 4.

The researcher briefly elaborates on the outcomes resulting from SME responses. This is followed by recommended action expected from relevant stakeholders.

The study revealed that SMEs apply innovative processes in their businesses and work in a favourable physical environment. However, that is not enough to enhance their operational performance. SMEs do not access GFIS sufficiently which might lead to less growth and development. Furthermore, access to GFIS is impeded by lack of

awareness of these schemes. A number of SMEs agreed that the assistance from government schemes can enhance their operational performance. Therefore, it is incumbent upon government (government agents, dti and seda) to ensure that these schemes reach as many SMEs as possible in order to fulfil the goal of creating more jobs for SA citizens.

5.5   Limitations and delimitations of the study

Limitations are potential weaknesses in the study and are out of the researcher's control (Ellis and Levy 2009: 332). Due to time constraints and financial costs, the study was limited to the SMEs within the textile and clothing industry in the eThekwini district. The study did not focus on marketing or human resources where similar problems may occur. Therefore, the results cannot be generalised to all SMEs. It was also limited to variables that have an influence on operational performance for SMEs. These include SME awareness of GFIS, innovative processes and the extent of the physical environment's influence.

Delimitations describe the boundaries that the researcher has set for the study (Simon and Goes 2013: 2). The study focused on SME's and did not include survivalist enterprises as they are in the business for survival rather than growth. Only SMEs participated in this study.

5.6   Recommendation for future studies

The following are recommendations for future studies arising from the findings of this research.

- Monitoring and evaluating the application of innovative processes to enhance operational performance in SMEs.
- Monitoring and evaluating the extent of the physical environment to enhance the operational performance in SMEs.
- Monitoring and evaluating the objectives of government financial programmes in relation to SMEs.

5.7 Conclusion

SMEs, in the textile and clothing sector, in the eThekwini district apply innovative processes in their businesses and function in a favourable physical environment. However, many of them are still not aware of GFIS and have little information on how to access these schemes. This requires immediate intervention from the SA government to enhance the goal of using SMEs as agents of job creation and thus reduce the unemployment rate that is mounting every year.

LIST OF REFERENCES

Abdullah, K. H. A. 2004. Gender and business performance of Kuwaiti small firms: a comparative approach. *International Journal of Commerce and Management*, 14(3/4): 69-82.

Abrie, W. and Doussy, E. 2006. Tax compliance obstacles encountered by small and medium enterprises in South Africa. *Meditari Accountancy Research*, 14(1): 1-13.

Acar, E. and Goc, Y. 2011. Prediction of risk perception by owners' psychological traits in small building contractors. *Construction Management and Economics*, 29: 841-852.

Achanga, P., Shehab, E., Roy, R. and Nelder, G. 2006. Critical success factors for lean implementation within SMEs. *Journal of Manufacturing Technology Management*, 17(4): 460-471.

Adisa, T. A., Abdulraheem, I. and Mordi, C. 2014. The characteristics and challenges of small businesses in Africa: an exploratory study of Nigerian small business owners. *Economic Insights: Trends and Challenges*, 3(4): 1-14.

Al-Aomar, R., El-Khasawneh, B. and Obaidat, S. 2013. Incorporating time standards into generative CAPP: a construction steel case study. *Journal of Manufacturing Technology Management*, 24(1): 95-112.

Alfes, K., Truss, C., Soane, E. C., Rees, C. and Gatenby, M. 2010. Creating an engaged workforce: findings from the Kingston employee engagement consortium project. London: Chartered Institute of Personnel and Development.

Andries, P. and Czarnitzki, D. 2014. Small firm innovation performance and employee involvement. *Small Business Economics*, 43(1): 21-38.

Ashrafi, R. and Murtaza, M. 2008. Use and impact of ICT on SMEs in Oman. *The Electronic Journal Information Systems Evaluation*, 11(3): 125-138.

Association of Chartered Certified Accountants (ACCA). 2012. *Access to finance for SMEs: a global agenda* (online). Available:

http://www.accaglobal.com/content/dam/acca/global/PDF-technical/small-business/pol-afb-atfs.pdf (Accessed 17 February 2016).

Australian Bureau of Statistics. 2013. *Census and sample* (online). Available: http://www.abs.gov.au/websitedbs/a3121120.nsf/home/statistical+language+-+census+and+sample (Accessed 06 August 2015).

Bargelis, A., Cikotiene, D. and Ramonas, Z. 2014. Impact of human factors and errors for product quality and reliability in the integrated approach of product and process design, maintenance and production. *Mechanika*, 20(1): 92-98.

Becker, F., Quinn, K. L., Rappaport, A. J. and Sims, W. R. 1994. *Implementing innovative workplaces: organisational implications of different strategies*. Ithaca, NY: Cornell University.

Berghout, E. ed. 2012. *Leading issues in ICT evaluation research*. Reading, UK: Academic Publishing.

Bititci, U. S. 2011. Managerial processes: business process that sustain performance. *International Journal of Operations and Production Management*, 31(8): 851-887.

Blunden, T. and Thirlwell, J. 2013. *Mastering operational risk: a practical guide to understanding operational risk and how to manage it*. 2nd ed. Harlow, UK: Pearson.

Booyens, I. 2011. Are small, medium-and-micro-sized enterprises engines of innovation? The reality in South Africa. *Science and Public Policy*, 38(1): 67-78.

Bortolotti, T., Danese, P. and Romano, P. 2013. Assessing the impact of just-in-time on operational performance at varying degrees of repetitiveness. *International Journal of Production Research*, 51(4): 1117-1130.

Boter, H. and Lundstrom, A. 2005. SME perspectives on business support services. *Journal of Small Business and Enterprise Development*, 12(2): 244-258.

Bowen, M., Morara, M. and Mureithi, S. 2009. Management of business challenges among small and micro enterprises in Nairobi-Kenya. *KCA Journal of Business Management*, 2(1): 16-31.

Brombacher, A., Hopma, E., Ittoo, A., Lu Y., Luyk, I., Maruster, L., Ribeiro, J., Weijters, T. and Wortmann, H. 2012. Improving product quality and reliability with customer experience data. *Quality and Reliability Engineering International*, 28(8): 873-886.

Brown, J. D. 2011. Likert items and scales of measurement. *SHIKEN*: *JALT Testing and Evaluation SIG Newsletter*, 15(1): 10-14.

Cahoy, E. 2016. *Empirical research in education and the behavioural/social sciences* (online). Available: http://psu.libguides.com/emp (Accessed 28 January 2016).

Carmeli, A., Reiter-Palmon, R. and Ziv, E. 2010. Inclusive leadership and employee involvement in creative tasks in the workplace: the mediating role of psychological safety. *Creativity Research Journal*, 22(3): 250-260.

Chan, F. T. S., Jiang, B. and Tang, N. K. H. 2000. The development of intelligent decision support tools to aid the design of flexible manufacturing systems. *International Journal of Production Economics*, 65(1): 73-84.

Chen, J. and Silverthorne, C. 2005. Leadership effectiveness, leadership style and employee readiness. *Leadership & Organisation Development Journal*, 26(4): 280-288.

Chingwaru, T. 2014. Impact of trade and economic liberalisation policy reforms on the operations of selected small to medium enterprises (SMEs) in Zimbabwe: a comparative study with South Africa's experiences. D. Tech, Durban University of Technology.

Chirwa, D. M. and Nijzink, L. eds. 2012. *Accountable government in Africa: perspectives from public law and political studies.* Cape Town: UCT Press.

Chomal, N. and Baruah, P. 2014. Performance linked reward and job satisfaction: banking sector. *SCMS Journal of Indian Management*, 11(4): 53-60.

Chong, S. 2008. Success in electronic commerce implementation: a cross-country study of small and medium sized enterprises. *Journal of Enterprise Information Management*, 21(5): 468-492.

Complete Network Solution (online). 2014. Available: http://www.cns-it.co.uk/importance-internet-businesses/ (Accessed 22 June 2016).

Congdon, J. D and Dunham, A. E. 1999. Defining the beginning: the importance of research design. In K.L. Eckert, K.A. Bjorndal, F.A. Abreu-Grobois, and M. Donnelly (eds) *Research and management techniques for the conservation of sea turtles*, Vol 4: 1-5. IUCN/SSC Marine Turtle Specialist Group.

Cooper, D. R. and Schindler, P. S. 1998. *Business research methods.* 6th ed. New York: McGraw-Hill.

Cornish, K. and Mugova, A. 2014. Improving access to finance for small-and medium-sized enterprises in the road sector: the CrossRoads Guarantee Fund in Uganda. *Enterprise Development and Microfinance*, 25(2): 135-149.

Cristina, V. 2003. The importance of an innovative leader in the organisation. *Bucharest University Annals of Faculty of Economics,* 1(2): 703-709.

Cronbach, L. J. 1951. Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3): 297-334.

Crossman, A. 2014. *Social system* (online). Available: http://sociology.about.com/od/S_Index/g/Social-System.htm (Accessed 17 October 2014).

Dalberg Global Development Advisors. 2011. *Report on support to SMEs in developing countries through financial intermediaries* (online). Available: http://www.eib.org/attachments/dalberg_sme-briefing-paper.pdf (Accessed 31 January 2016).

David, M. and Sutton, C. D. 2011. *Social research.* 2nd ed. London: Sage.

Dawson, C. 2009. *Introduction to research methods: a practical guide for anyone undertaking a research project.* 4th ed. Oxford: How To Books.

Day, J. W., Holladay, C. L., Johnson, S. K. and Barron, L. G. 2014. Organisational rewards: considering employee need in allocation. *Personnel Review*, 43(1): 74-95.

De Beer, A. and Rossouw, D. 2012. *Focus on operational management: a generic approach.* 2nd ed. Cape Town: Juta.

Dziobek, C. H., Jimnez de Lucio, A. and Chan, J. 2013. *Definitions of government in IMF-supported programs* (online). Available:

https://www.imf.org/external/pubs/ft/tnm/2013/tnm1301.pdf (Accessed 24 January 2016).

Economic Development and Growth in eThekwini (EDGE) (online). 2013. Available: http://www.durban.gov.za/Resource_Centre/edge/Documents/SMME's.pdf (Accessed 13 February 2014).

Ejembi, S. A. and Ogiji, P. 2007. A comparative analysis of risks and returns of running small, medium and micro enterprises in North and Central Nigeria. *Journal of Social Science*, 15(1): 7-15.

Elahi, M. and Dehdashti, M. 2011. Classification of researches and evolving a consolidating typology of management student. In Proceedings of the 2011 Annual Conference on Innovations in Business & Management, 1-15. London: The Center for Innovations in Business and Management Practice.

Ellis, T. J. and Levy, Y. 2009. Towards a guide for novice researchers on research methodology: review and proposed methods. *Issues in Informing Science and Information Technology*, 6: 323-337.

English, J. and Hay, P. 2015. Black South African women in construction: cues for success. *Journal of Engineering, Design and Technology*, 13(1): 144-164.

Explorable.com. 2009. Independent one-sample t-test (online). Available: https://explorable.com/independent-one-sample-t-test (Accessed 28 April 2016).

Fawcett, J. and Garity, J. 2009. *Evaluating research for evidence-based nursing practice*. Philadelphia: F. A. Davis.

Fatoki, O. and Odeyemi, A. 2010. Which new small and medium enterprises in South Africa have access to bank credit? *International Journal of Business and Management*, 5(10): 128-136.

Finkel, E. J. and Baumeister, R. F. 2009. *Attraction and rejection* (online). Available: http://faculty.wcas.northwestern.edu/eli-finkel/documents/57_FinkelBaumeister_AttractionRejection_AdvancedSocialPsychology.pdf (Accessed 21 March 2016).

Food and Agriculture Organisation (online). 2016. Available: http://www.fao.org/docrep/W3241E/w3241e04.htm (Accessed 23 June 2016).

Fraser, J. R. S., Simkins, B. J. and Narvaez, K. 2015. *Implementing enterprise risk management; case studies and best practices*. Hoboken, NJ: John Wiley.

Frauenheim, E. 2015. *The dawn of the great workplace era* (online). Available: http://www.workforce.com/2015/03/23/the-dawn-of-the-great-workplace-era/. (Accessed 21 June 2016).

Fumo, N. D. G. and Jabbour, C. J. C. 2011. Barriers faced by MSEs: evidence from Mozambique. *Industrial Management & Data Systems*, 111(6): 849-868.

Garcia, E. 2011. *A tutorial on correlation coefficients* (online). Available: http://web.simmons.edu/~benoit/lis642/a-tutorial-on-correlation-coefficients.pdf (Accessed 22 March 2016).

Gartner, W. and Liao, J. 2012. The effects of perceptions of risk, environmental uncertainty, and growth aspirations on new venture creation success. *Small Business Economics*, 39(3): 703-712.

Ghita, C. 2014. A decision support system for business location based on open GIS technology and data. *Managing Global Transitions*, 12(2): 101-120.

Gill, A. and Biger, N. 2012. Barriers to small business growth in Canada. *Journal of Small Business and Enterprise Development*, 19(4): 656-668.

Gilmore, A., Carson, D. and O'Donnell, A. 2004. Small business owner-managers and their attitude to risk. *Marketing Intelligence & Planning*, 22(3): 349-360.

Global Partnership for Financial Inclusion. 2011. *Strengthening access to finance for women-owned SMEs in developing countries.* Washington, DC: International Finance Corporation.

GraphPad Software. 2015. *The binomial test* (online). Available: http://www.graphpad.com/guides/prism/6/statistics/index.htm?stat_binomial.htm (Accessed 19 April 2016).

Green, F. 2013. *Youth entrepreneurship* (online). Available: http://www.oecd.org/cfe/leed/youth_bp_finalt.pdf (Accessed 20 November 2015)

Groepe, F. 2015. *The role of small business in the economy. Address by Mr Francois Groepe, Deputy Governor of the South African Reserve Bank (SARB), at*

the *AHI conference on 'The role of business in local government and local economic development', George, 9 October* (online). Available: http://www.gov.za/speeches/deputy-govenor-francois-groepe-role-small-business-economy-13-oct-2015-0000. (Accessed 21 June 2016).

Gstraunthaler, T. and Cramer, P. 2012. The South African system for start-up companies: assessing the Khula Indemnity Scheme. *Competition and Change*, 16(1): 56-68.

Gunasekaran, A., Patel, C. and Tirtiroglu, E. 2001. Performance measures and metrics in a supply chain environment. *International Journal of Operations and Production Management*, 21(1/2): 71-87.

Hall, J. F. 2013. *What is SPSS?* (online). Available: http://surveyresearch.weebly.com/what-is-spss.html (Accessed 13 February 2014).

Hameed, S. 2011. *Special financial incentive schemes for the girl child in India* (online). United Nations Population Fund, India. Available: http://countryoffice.unfpa.org/india/drive/SPECIALFINANCIALINCENTIVESCHEMES.pdf (Accessed 24 January 2016).

Harmon, P. 2010. Scope and evolution of business process management. In: Vom Brocke, J. and Rosemann, M. eds. *Handbook on Business Process Management 1: Introduction, Methods, and Information Systems.* New York: Springer, 37-81.

Hauser, L. 2014. Work motivation in organizational behavior. *Economics, Management and Financial Markets*, 9(4): 239-246.

Hao, J., Ilan, A. and Yu, C. 2011. Environmental dynamism, innovation, and dynamic capabilities: the case of China. *Journal of Enterprising Communities: People and Places in the Global Economy*, 5(2): 131-144.

Haynes, G. W., Onochie, J. I., Lee, M., Puryear, A. N., Rogoff, E. G. and Heck, R. K. Z. 2009. Financial intermingling in Korean-American and Mexican-American small businesses. *Journal of Development Entrepreneurship*, 14(3): 297-310.

Higgins, D., Mirza, M. and Drozynska, A. Power, politics and learning: a social enactment of the SME owner/manager. *Journal of Small Business and Enterprise Development*, 20(3): 470-483.

Hitka, M. and Balazova, Z. 2015. The impact of age, education and seniority on motivation of employees. *Business: Theory and Practice*, 16(1): 113-120.

How to stimulate and cash in on creativity. 1997. *Management Development Review*, 10(6): 205-206.

Huddleston, P. 2014. Healthy work environment framework within an acute care setting. *The Journal of Theory Construction and Testing*, 18(2): 50-54.

Hudgins, D. and Gevrek, D. 2015. A labor utility index to measure worker welfare and labor market performance. *Theoretical and Applied Economics*, 3(604): 155-170.

International Finance Corporation. 2010. *The SME banking knowledge guide* (online). Available: http://www.ifc.org/wps/wcm/connect/b4f9be0049585ff9a192b519583b6d16/SMEE.pdf?MOD=AJPERES (Accessed 17 February 2016).

Internet World Stats (online). 2015. Available: http://www.internetworldstats.com/stats1.htm (Accessed 07 November 2015).

Irawanto, D. W. 2015. Employee participation in decision-making: evidence from a state-owned enterprise in Indonesia. *Management*, 20(1): 159-172.

Jorosi, B. N. 2008. Environmental scanning in Botswana's SMEs: a study of the manufacturing industry. *Libri*, 58(4): 224-233.

Jutla, D., Bodorik, P. and Dhaliwal, J. 2002. Supporting the e-business readiness of small and medium-sized enterprises: approaches and metrics. *Internet Research* 12(2): 139-164.

Kalaignanam, K., Kushwaha, T. and Eilert, M. 2013. The impact of product recalls on future product reliability and future accidents: evidence from the automobile industry. *Journal of Marketing*, 77(2): 41-57.

Kalb, I. 2013. *Innovation isn't just about brainstorming new ideas* (online). Available: http://www.businessinsider.com/innovate-or-die-a-mantra-for-every-business-2013-7 (Accessed 21 June 2016).

Karadag, H. 2015. Financial management challenges in small and medium-sized enterprises: a strategic management approach. *Emerging Markets Journal*, 5(1): 25-40.

Kariv, D. 2012. Off stage-on stage: men and women entrepreneurs leading change and business growth. *Journal of Enterprising Communities: People and Place in the Global Economy*, 6(2): 169-184.

Katz, J. and Green, R. 2013. *Entrepreneurial small business*. 4th ed. New York: McGraw-Hill.

Kauremaa, J., Smaros, J. and Holmstrom, J. 2009. Patterns of vendor-managed inventory: findings from a multiple-case study. *International Journal of Operations and Production Management*, 29(11): 1109-1139.

Kitchenham, B. and Pfleeger, S.L. 2002. Principles of survey research part 5: populations and samples. *Software Engineering Notes*, 27(5): 17-20.

Kock, N., Danesh, A. and Komiak, P. 2008. A discussion and test of a communication flow optimization approach for business process redesign. *Knowledge and Process Management*, 15(1): 72-85.

Kostenko, T. 2014. Labor productivity index decomposition analysis and the innovation-driven methods of its improvement on sugar plant. *Management Theory and Studies for Rural Business and Infrastructure Development*, 36(2): 325-335.

Kreiser, P. M., Marino, L. D., Dickson, P. and Weaver, K. M. 2010. Cultural influences on entrepreneurial orientation: the impact of national culture on risk taking and proactiveness in SMEs. *Entrepreneurship Theory and Practice*, 34(5): 959-984.

Kruger, L.P. 2011. The impact of black economic empowerment (BEE) on South African businesses: Focusing on ten dimensions of business performance. *Southern African Business Review*, 15(3): 207-233.

Kruger, D. and Ramphal, R. 2009. *Operations management*. 2nd ed. Cape Town: Oxford University Press.

Kruger, D., Ramphal, R. and Maritz. 2013. *Operations management*. 3rd ed. Cape Town: Oxford University Press.

Kula, V. and Tatoglu, E. 2003. An exploratory study of internet adoption by SMEs in an emerging market economy. *European Business Review*, 15(5): 324-333.

KZN Clothing and Textile Cluster. 2012. *South African clothing and textile industry trends* (online). Available: http://www.kznctc.org.za/sector_profile (Accessed 15 February 2016).

Laforet, S. 2008. Size, strategic, and market orientation affects on innovation. *Journal of Business Research*, 61(7): 753-764.

Laerd Dissertation. 2012. *Construct validity* (online). Available: http://dissertation.laerd.com/construct-validity.php (Accessed 30 January 2016).

Laerd Statistics. 2013. *One-sample t-test using SPSS* (online). Available: https://statistics.laerd.com/spss-tutorials/one-sample-t-test-using-spss-statistics.php (Accessed 18 July 2015).

Langier, F. J. 1963. Statistical control of time standards. *Management Science,* 9(4): 527-541.Likar, B., Macur, M. and Trunk-Sirca, N. 2006. System approach for innovative education process. *Kybernetes*, 35(7/8): 1071-1086.

Liker, J. and Franz, J. 2011. *The Toyota way to continuous improvement*. New York: McGraw-Hill.

Magaisa, G. M., Duggal, S. and Muhwandavaka, R. 2013. Environmental scanning assessment in Zimbabwean SMEs. *International Journal of Economy, Management and Social Sciences*, 2(8): 593-597.

Mainemelis, C. 2010. Stealing fire: creative deviance in the evolution of new ideas. *Academy of Management Review*, 35(4): 558-578.

Maoto, M. 2014. Swelling the ranks of SA's black industrialists. *Finweek*, November 13:10-12.

Manuere, F., Gwangwava, E. and Gutu, K. 2012. Barriers to the adoption of ICT by SMEs in Zimbabwe: an exploratory study in Chinhoyi district. *Interdisciplinary Journal of Contemporary Research in Business*, 4(6): 1142-1156.

Marri, H. B. and Gunasekaran, B. K. 2003. Implementation of computer-integrated manufacturing in small and medium enterprises. *Industrial and Commercial Training*, 35(4): 151-157.

MarketLine industry profile. 2013. Road and rail in South Africa. *An informa business*, 1-30.

Markstrom, L. 2016. 4 key ways to create a culture of innovation. *Business Source Complete*. 4-4.

Mathibe, M. S. and Van Zyl, J. H. 2011. The impact of business support services to SMMEs in South Africa. *International Business & Economics Research Journal*, 10(11): 101-108.

Mattsson, S. 2007. Inventory control in environments with short times. *International Journal of Physical Distribution and Logistics Management*, 27(2): 115-130.

Mbonyane, B. and Ladzani, W. 2011. Factors that hinder the growth of small businesses in South African townships. *European Business Review*, 23(6): 550-560.

McFadzean, E. 2001. Critical factors for enhancing creativity. *Strategic Change,* 10(5): 267-283.

Mellat-Parast, M. 2013. Quality citizenship, employee involvement, and operational performance: an empirical investigation. *International Journal of Production Research*, 51(10): 2805-2820.

Metaxiotis, K. 2009. Exploring the rationales for ERP and knowledge management integration in SMEs. *Journal of Enterprise Information Management*, 22(1/2): 51-62.

Mihajlovic, I. and Drazeta, L. 2014. The internet as a medium for improving organisational development. Paper presented at Sinteza 2014: Impact of the internet on business activities in Serbia and worldwide. Available: doi:10.15308/sinteza-2014-288-291.

Migiro, S. O. and Wallis, M. 2006. Relating Kenyan manufacturing SMEs' finance needs to information on alternative sources of finance. *South African Journal of Information Management*, 8(1): 1-14.

Miles, D. A. 2014. Examining forces that impact firms: a factor analysis of endogenous and exogenous risk factors and their effect on small business enterprises. *Academy of Business Research Journal*, 2: 20-35.

Mishra, K., Boynton, L. and Mishra, A. 2014. Driving employee engagement: the expanded role of internal communications. *International Journal of Business Communication*, 51(2): 183-202.

Miroslava, C. 2013. The effectiveness of investment incentives in certain foreign companies operating in the Czech Republic. *Journal of Competitiveness*, 5(1): 108-120.

Molina-Castillo, F., Calantone, R. J., Stanko, M. A. and Munuera-Aleman, J. 2013. Product quality as a formative index: evaluating an alternative measurement approach. *Journal of Product Innovation Management,* 30(2): 380-398.

Myny, D., De Bacquer, D., Van Hecke, A., Beeckman, D., Verhaeghe, S. and Van Goubergen, D. 2013. Validation of standard times and influencing factors during the development of the workload indicator for nursing. *Journal of Advanced Nursing,* 70(3): 674-686.

Natarajan, M., Senthil, V., Devadasan, S. R., Mohan, N. V. and Sivaram, N. M. 2013. Quality and reliability in new product development. *Journal of Manufacturing Technology Management*, 24(8): 1143-1162.

Natario, M. M. S., Couto, J. P. A., Tiago, M. T. B. and Braga, A. M. M. 2011. Evaluating the determinants of national innovative capacity among European countries. *Global Journal of Management Business Research*, 11(11): 67-78.

Nedelko, Z. and Potocan, V. 2013. The role of management innovativeness in modern organizations. *Journal of Enterprising Communities: People and Places in the Global Economy*, 7(1): 36-49.

Newman, A. and Sheikh, A. Z. 2002. Organisational rewards and employee commitment: a Chinese study. *Journal of Management Psychology*, 27(1): 71-89.

Norek, T. 2011. Problems of SME sector enterprise innovative capacity measurement. In S. Hittmar (ed.) *Theory of management, the selected problems for*

the development support of management knowledge base, University of Zilina, Zilina, Slovakia, 89-95.

OECD. 2009. *Top barriers and drivers to SME internationalisation: Report by the OECD working party on SMEs and entrepreneurship* (online). Available: http://www.oecd.org/cfe/smes/43357832.pdf (Accessed 17 February 2016).

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*, 4(1): 7-21.

Okpara, J. O. and Wynn, P. 2007. Determinants of small business growth constraints in a Sub-Saharan African economy. *S. A. M. Advanced Management Journal*, 72(2): 24-37.

Oksanen, K. and Stahle, P. 2013. Physical environment as a source for innovation: investigating the attributes of innovative space. *Journal of Knowledge Management*, 17(6): 815-827.

Olufemi, O. J. 2015. The effects of electricity consumption on industrial growth in Nigeria. *Journal of Economics and Sustainable Development*, 6(13): 54-59.

Orb, A., Eisenhauer, L. and Dianne, W. 2000. Ethics in qualitative research. *Journal of Nursing Scholarship*, 33(1): 93-96.

O'Regan, N., Ghobadian, A. and Sims, M. 2006. Fast tracking innovation in manufacturing SMEs. *Technovation,* 26(2): 251–261.

Oriaku, N. 2012. Current challenges facing small businesses: case of Brazil and United States. *International Journal of Finance and Policy Analysis*, 4(2): 16-25.

Otto, S. C., Wahl, K. R., Lefort, C. C. and Frei, W. H. P. 2012. Exploring the impact of multitasking in the workplace. *Journal of Business Studies Quarterly*, 3(4): 154-162.

Paneth, N., Susser, E. and Susser, M. 2002. Origins and early development of the case-control study: part 2, the case-control study from Lane-Claypon to 1950. *Sozial- und Präventivmedizin*, 47(6): 359-365.

Perks, S. 2010. Problem-solving techniques of growing very small businesses. *Journal of Enterprising Communities: People and Places in the Global Economy*, 4(3): 220-233.

Perlow, L. 2014. Manage your team's collective time. *Harvard Business Review*, 92(6): 23-25.

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.

Phipps, S. T. A., Prieto, L. C. and Ndinguri, E. N. 2013. Understanding the impact of employee involvement on organizational productivity: the moderating role of organizational commitment. *Journal of Organizational Culture, Communication and Conflicts*,17(2): 107-120.

Pisano, G.P. 2015. *You need an innovation strategy* (online). Available: https://hbr.org/2015/06/you-need-an-innovation-strategy (Accessed 21 June 2016)

Poon, J. M. L. 2013. Effects of benevolence, integrity, and ability on trust-in-supervisor. *Employee Relations*, 35(4): 396-407.

Presslee, A., Vance, W. T. and Webb, R. A. 2013. The effects of reward type on employee goal setting, goal commitment, and performance. *The Accounting Review*, 88(5): 1805-1831.

Purcarea, L., Espinosa, M. D. M. B. and Apetrei, A. 2013. Innovation and knowledge creation: perspective on the SMEs sector. *Management Decision*, 51(5): 1096-1107.

Rajam Ramaswamy, N., Selladurai, V. and Gunasekaran, A. 2002. Just-in-time implementation in small and medium enterprises. *Work Study*, 51(2): 85-90.

Rajasekar, S., Philominathan, P. and Chinnathambi, V. 2006. Research methodology (online). Available: arXiv preprint physics/0601009 (Accessed 12 June 2016).

Rajeev, N. 2008. Inventory management in small and medium enterprises. *Management Research News*, 31(9): 659-669.

Rasila, H. 2012. Attitudes towards problems in the physical working environment: case contact centre. *Journal of Corporate Real Estate*, 14(2): 94-104.

Reckhenrich, J., Kupp, M. and Anderson, J. 2009. Understanding creativity: The manager as artist. *Business Strategy Review*, 20(2): 68-73.

Reja, U., Manfreda, L. K., Hlebec, V. and Vehovar, V. 2003. Open-ended vs. close-ended questions in web questionnaires. In: Ferligoj, A. and Mrvar, A. eds. *Developments in Applied Statistics*. Ljubjanka: FDV, 159-177.

Republic of South Africa. Department of Trade and Industry. 2011. *Youth enterprise development strategy 2013-2023* (online). Available: https://www.thedti.gov.za/news2013/YEDS_strategy2013.pdf (Accessed 25 November 2015).

Republic of South Africa. Department of Trade and Industry. 2013. *A guide to the dti incentive schemes 2012/13* (online). Available: https://www.thedti.gov.za/financial_assistance/docs/incentive_booklet2012-2013.pdf (Accessed 16 February 2016).

Republic of South Africa. Department of Trade and Industry. 2014. *A guide to the dti incentive schemes 2014/15* (online). Available: https://www.thedti.gov.za/financial_assistance/docs/thedti_Incentive_Guide2014_2015.pdf (Accessed 24 January 2016)

Republic of South Africa. Department of Trade and Industry. 2015. *Financial assistance* (online). Available: https://www.thedti.gov.za/financial_assistance/financial_assistance.jsp (Accessed 24 January 2016).

Richard, D. 2009. Small business and government: the Richard report. Submission to Shadow Cabinet. London: Conservative Central Office.

Robinson, S. and Stubberud, H.A. 2015. A comparison of methods of creativity in small and large European businesses. *International Journal of Entrepreneurship*, 19: 140-151.

Rogerson, C. M. 2010. Local economic development in South Africa: key strategic challenges. *Development Southern Africa*, 27(4): 481-495.

Rothe, P., Lindholm, A., Hyvonen, A. and Nenone, S. 2012. Work environment preferences: does age make a difference? *Facilities*, 30(1/2): 78-95.

Sekaran, U. and Bougie, R. 2013. *Research methods for business: a skill building approach*. 6th ed. Oxford, UK: John Wiley.

Singh, R. K., Garg, S. K. and Deshmukh, S. G. 2008. Strategy development by SMEs for competitiveness: a review. *An International Journal*, 15(5): 525-547.

Simon, M. and Goes, J. 2013. *Assumptions, limitations, delimitations and scope of the study* (online). Available: http://www.dissertationrecipes.com/assumptions-limitations-delimitations/ (Accessed 12 June 2016)

Sousa, S. and Aspinwall, E. 2010. Development of a performance measurement framework for SMEs. *Total Quality Management & Business Excellence*, 21(5): 475-501.

SouthAfrica.info. 2009. *South Africa's textile industry* (online). Available: http://www.southafrica.info/business/economy/sectors/textiles-overview.htm (Accessed 15 February 2016).

Stanciu, V. and Tinca, A. 2014. A critical look on the student's internet use: an empirical study. *Journal of Accounting and Management Information Systems*, 13(4): 739-754.

Stefanovska-Petkovska, M., Bojadziev, M. and Mucunski, Z. 2015. Does participative management produce satisfied employees? Evidence from the automotive industry. *Serbian Journal of Management*, 10(1): 75-88.

Stevens. R. E., Loudon, D. L. and Cole, H. S. 2002. Small business use of the internet: a pilot study. *Journal of Internet Commerce*, 1(1): 75-84.

Stumpt, S. A., Tymon, W. G., Favorito, N. and Smith, R. R. 2013. Employees and change initiatives: intrinsic rewards and feeling valued. *Journal of Business Strategy*, 34(2): 21-29.

Subhan, Q. A., Mehmood, M. R. and Sattar, A. 2013. Innovation in small and medium enterprises (SME's) and its impact on economic development in Pakistan. In Proceedings of 6th International Business and Social Sciences Research Conference, Dubai, 3–4 January.

Szczepankska-Woszczyna, K. 2014. Innovation processes in the social space of the organisation. *Regional Formation and Development Studies*, 3(14): 220-230.

Tangri, R. and Southall, R. 2008. The politics of black economic empowerment in South Africa. *Journal of Southern African Studies*, 34(3): 699-716.

Tartal, J. 2013. Corrective and preventive action. *FDA Small Business*, 1-36.

Ten top tips for small to medium enterprise (SME) success: 21st century entrepreneurs are profiting from the SME owner-manager model. 2014. *Strategic Direction*, 30(2): 14-17.

Terziovski, M. 2010. Innovation practice and its performance implications in small and medium enterprises (SMEs) in the manufacturing sector: a resource-based view. *Strategic Management Journal*, 31(8): 892-902.

Thompson, P., Williams, R. and Thomas, B. 2013. Are UK SMEs with active web sites more likely to achieve both innovation and growth? *Journal of Small Business and Enterprise Development*, 20(4): 934-965.

Timm, S. 2011. How South Africa can boost support to small businesses: lessons from Brazil and India. *Trade & Industrial Policy Strategies*, 1-111.

Tseng, K. K. and Johnsen, R. E. 2011. Internationalization and the internet in UK manufacturing SMEs. *Journal of Small Business and Enterprise Development*, 18(3): 571-593.

Turton, N. and Herrington, M. 2013. *Global Entrepreneurship Monitor South Africa 2012 Report* (online). Available: http://www.gemconsortium.org/docs/2801/gem-south-africa-2012-report (Accessed 14 February 2014).

United Kingdom. Department for Business Innovation & Skills (BIS). 2012. *SME access to external finance*. BIS Economics Paper no 16: 1-46. London: Government Printer.

Urban, B. and Naidoo, R. 2012. Business sustainability: empirical evidence on operational skills in SMEs in South Africa. *Journal of Small Business and Enterprise Development*, 19(1): 146-163.

Underhill Corporate Solutions. 2011. *Literature review on small and medium enterprises' access to credit and support in South Africa. Prepared for National Credit Regulator (NCR)* (online). Available: http://www.ncr.org.za/pdfs/Research_Reports/Literature%20Review%20on%20SME%20Access%20to%20Credit%20in%20South%20Africa_Final%20Report_NCR_Dec%202011.pdf (Accessed 31 March 2014).

Van Den Berg, R. G. 2014. *SPSS tutorials* (online). Available: http://www.spss-tutorials.com/spss-binomial-test/ (Accessed 19 April 2016).

Van Eeden, A. 2013. Small business perceptions in the central business district fringes of four metropolitan areas in South Africa. *South African Geographical Journal*, 95(2): 135-148.

Van Wyk, J. A., Cabaret, J. and Michael, L. M. 2004. Morphological identification of nematode larvae of small ruminants and cattle simplified. *Veterinary Parasitology*, 119: 277-306.

Vasilescu, L. 2014. Accessing finance for innovative EU SMES: key drivers and challenges. *Journal of Economics and Business*, 12(2): 35-47.

Visagie, J. C. 1997. SMMEs' challenges in reconstructing South Africa. *Management Decision*, 35(9): 660-667.

Voss, C. A., Ahlstrom, P. and Blackmon, K. 1997. Benchmarking and operational performance: some empirical results. *International Journal of Operations and Production Management*, 17(10): 1046-1058.

Wagner, A., Turner, D. E. and Byrd T. A. 2001. A survey of innovative technology processes in manufacturing. *Industrial Management & Data Systems*, 101 (5): 210-216.

Wagner, C., Kawulich, B. and Garner, M. 2012. *Doing social research*. New York: McGraw-Hill.

Watson, J. and Newby, R. 2005. Biological sex, stereotypical sex-roles, and SME owner characteristics. *International Journal of Entrepreneurial Behaviour & Research*, 11(2): 129-143.

Wided, R. Y. 2012. For a better openness towards new ideas and practices. *Journal of Business Studies Quarterly*, 3(4): 132-144.

Woodside, A. G. and Biemans, W. G. 2005. Modeling innovation, manufacturing, diffusion and adoption/rejection processes. *Journal of Business & Industrial Marketing*, 20(7): 380-393.

World Economic Forum. 2014. *The Global Competitiveness Report 2014-2015* (online). Available: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf (Accessed 19 February 2016).

Yu-ting, C. 2014. Telecommunications service industry. *Taiwan Industry Report*, 1-14.

Zeng, Z., Wen, M. and Kang, R. 2013. Belief reliability: a new metrics for products' reliability. *Fuzzy Optimization and Decision Making*, 12: 15-27.

ANNEXURES

ANNEXURE 1: Participation letter of information

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<div align="right">

1040 12th street

Clermont

3610

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LETTER OF INFORMATION AND CONSENT

Factors influencing operational performance for SMME growth within the Textile and Clothing manufacturing sector in the eThekwini District

Dear participant

I am currently undertaking a research project as part of my studies towards a Masters' degree in Technology: Business Administration at Durban University of Technology. The study aims to investigate factors influencing operational performance for SMME growth within the Textile and Clothing manufacturing sector in the eThekwini District.

Would you agree to complete a questionnaire for the study? The questionnaire will take approximately 15 minutes. Participation is voluntary and you are free to withdraw from the study at any time without giving reasons, and without prejudice or any adverse consequences. The information you give will only be used for research purposes and will be aggregated with other responses and only the overall or average information will be used. Your identity and individual answers will be kept totally confidential. Should you wish to discuss this further please feel free to contact me or my supervisor (Dr D Zondo, telephone: 031 373 6831/5147 or DumisaniZ@dut.ac.za), or the IREC Administrator, Lavisha Deonarian: 031 373 2900 or LavishaD@dut.ac.za).

Your assistance will be much appreciated
Yours faithfully

Sbonelo Dladla
0849698702/0782507109
sbonelo.thusi@gmail.com

Please complete the following as confirmation of your willingness to participate in this research project:

I, …………………..……., have adequately discussed the study with the research coordinator. I understand that I may withdraw from the study at any time without giving reasons. Therefore, I voluntarily agree to be part of the study by completing a questionnaire.

ANNEXURE 2: Study questionnaire

The aim of this study is to investigate factors influencing operational performance for SMME growth within the Textile and Clothing manufacturing sector in the eThekwini District.

Instructions

- The majority of the questionnaire contains a number of statements. You are simply asked either to indicate the extent to which you agree or disagree with each or respond with a 'yes' or 'no'. Simply place a cross (X) on the appropriate block.
- If you do not understand any of the questions, ask for assistance. I will call personally to clarify any problems you may encounter.

RESEARCH QUESTIONNAIRE

Sections A, B and C of the questionnaire deal with the background information, biographical details of the respondent and operational performance, respectively. Section D deals with awareness on government incentive schemes; section E deals with the innovative processes for operational performance and section F deals with the physical environment of the business. Although I'm aware of the sensitivity of these questions, this information will help compare results from various groups of respondents. Once again, I assure you that your response will remain anonymous. Your co-operation is appreciated.

SECTION A – BACKGROUND INFORMATION

1. Please indicate business type below. Select ONE option only

Micro enterprise (*fewer than 5 employees*)	
Small enterprise (*5 – 49 employees*)	
Medium enterprise (*50 – 200 employees*)	

2. Indicate the number of personnel in your organisation as per the 'criteria' shown below.

	Number of Personnel
2.1 Owners	
2.2 Managers (*if they are different from owners*)	
2.3 Support staff (*Employees that support & advice line personnel*)	
2.4 Line personnel (*Personnel that are directly involved in the day-to-day operations of the business*)	

SECTION B – BIOGRAPHICAL DETAILS OF THE RESPONDENT

3. Gender

Male	
Female	

4. Age in years

<18	
18 – 25	
26 – 33	
34 – 41	
42 – 49	
50 or over	

5. Number of years in this business

0 – 3 years	
4 – 7 years	
8 – 11 years	
12 years or more	

6. Location of your business. Select ONE option only

Urban area (*the region surrounding a city*)	
Rural area (*an open swath of land that has few homes or other buildings, and not very many people*)	
Peri-urban area (*the landscape interface between town and country / urban and rural*)	

SECTION C – OPERATIONAL PERFORMANCE

7. Indicate your agreement that the following list of performance measurements apply to your business:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
7.1 Operators work within a set of standard times to perform a task					
7.2 There are measurable goals to measure the reliability of a product for customer usage					
7.3 Standards to measure the quality of a product are monitored					
7.4 There are sets of measurements to monitor how often the business sells and replaces its inventory					
7.5 There are labour indices for examining expenses in order to take business decisions					
7.6 Just-In-Time system, which ensures that the customer is supplied with the product they want on time and in the correct quantity, is applied in the business					

8. Please indicate your awareness, knowledge and usage of the following government incentive schemes

8.1 **I am aware of the:**	Yes	No
8.1.1 Black Business Supplier Development Programme (BBSDP)		
8.1.2 Production Incentive (PI)		
8.1.3 Sector-Specific Assistance Scheme (SSAS)		
8.1.4 Manufacturing Investment Programme (MIP)		
8.1.5 Isivande Women's Fund (IWF)		

8.2 **I know how to access the:**	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8.2.1 Black Business Supplier Development Programme (BBSDP)					
8.2.2 Production Incentive (PI)					
8.2.3 Sector-Specific Assistance Scheme (SSAS)					
8.2.4 Manufacturing Investment Programme (MIP)					
8.2.5 Isivande Women's Fund (IWF)					

8.3 **I have accessed the:**	Yes	No
8.3.1 Black Business Supplier Development Programme (BBSDP)		
8.3.2 Production Incentive (PI)		
8.3.3 Sector-Specific Assistance Scheme (SSAS)		
8.3.4 Manufacturing Investment Programme (MIP)		
8.3.5 Isivande Women's Fund (IWF)		

8.4 **I am currently supported by the:**	Yes	No
8.4.1 Black Business Supplier Development Programme (BBSDP)		
8.4.2 Production Incentive (PI)		
8.4.3 Sector-Specific Assistance Scheme (SSAS)		
8.4.4 Manufacturing Investment Programme (MIP)		
8.4.5 Isivande Women's Fund (IWF)		

8.5 Indicate your agreement with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8.5.1 The government financial incentive support fulfils the business objective(s)					
8.5.2 There is positive influence in using the government financial incentive support					

SECTION E – INNOVATIVE PROCESSES AT THE BUSINESS

9. Please indicate your agreement regarding the innovative processes used in your business.

At My Business…	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9.1 Problems are investigated before working on improvements					
9.2 The need to improve processes through innovation is identified					
9.3 Risks are taken in order to have positive impact on improvement processes					
9.4 The manner in which things are done motivates our employees to be innovative					
9.5 Our work environment supports innovative process which allows employees to gain respect among themselves					
9.6 Financial resources are assigned to support innovative process					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9.7 Our work settings allows for innovative process					
9.8 The innovative process is tested before implementation					
9.9 Employees are involved in the process experimentation					
9.10 There is time for innovative process					
9.11 Business policies allow employees to be freely innovative					

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9.12 There is ongoing communication between the manager(s) and employees on problem solving					
9.13 Rewards (e.g. praise, promotions, etc.) are given for innovative practise					

SECTION F – PHYSICAL ENVIRONMENT OF THE BUSINESS

10. Please indicate your agreement with the following items with regard to your business's physical environment

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
10.1 Our business location allows for productive trading					
10.2 We are closely located to the raw material supplies					
10.3 Our business location allows us to use the suppliers of our choice					
10.4 The location of our business makes it easy for our customers to reach us					
10.5 We are connected to the internet					
10.6 We have ready access to main roads					
10.7 We have electricity in our business					
10.8 We have access to telecommunication services in our business					

THANK YOU FOR YOUR CO-OPERATION IN COMPLETING THIS QUESTIONNAIRE. KINDLY RETURN THE QUESTIONNAIRE AS SPECIFIED IN THE COVERING LETTER.