The use of financial literacy concepts by entrepreneurs in the small and medium enterprise sector in Mpumalanga Province, South Africa

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Abstract

Financial literacy is one of the key factors that impact on the success of small and medium enterprises (SMEs) globally. The low levels of financial literacy of entrepreneurs influence the SMEs ability to grow and achieve sustainable results. The objective of this study is to understand the extent to which entrepreneurs in the SME sector pursue the financial literacy concepts, namely, budgeting, investing and borrowing in managing their business finances. The study also aims to establish the relationship between the use of financial literacy concepts and the performance of the SMEs.

This study was quantitative and descriptive in nature. The data was collected through questionnaires during face to face structured interviews. A total of 53 entrepreneurs from the Gert Sibande and the Emalahleni municipality districts in Mpumalanga Province participated in this study.

The results of the study indicated that most of the SMEs did pursue all the three financial literacy concepts in managing their business finances. Furthermore, the study revealed that entrepreneurs lacked the knowledge regarding other sources of capital such as venture capitalist funds and government agencies. The study also provided evidence of a positive relationship between the use of financial literacy concepts and the economic success of SMEs. This study recommends that key stakeholders such as government, private sector and academics use the outcomes of this study to develop educational programmes aimed at improving the financial literacy levels of entrepreneurs in the SME sector. This study focused on the SMEs in the mining industry, sampling for future studies could be broadened to include other sectors such as manufacturing, construction, tourism, etc.

Keywords

Financial Literacy, Entrepreneurs, Small and Medium Enterprises (SMEs)

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Luambo Musie	Date

Acknowledgement

I dedicate this work to my mother Tshinakaho Musie for her belief that education was the only way out of poverty.

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1.1 Background

In recent times, financial literacy has drawn keen interest of numerous key stakeholders including academics, government, private sector and community at large (Roberts, Struwig, Gordon, Viljoen & Wentzel, 2014). This follows a growing concern that individuals are experiencing financial distress worldwide and financial literacy has been cited as one of the major causes. Taft, Hosein and Mehrizi (2013) highlighted that there is a growing level of financial complexities globally, the financial environment is forever changing and this has resulted in decision making process regarding household and business financial matters more complex.

This complexity is exacerbated by the fact that most of individuals have been reported to have low levels of financial literacy globally. Guiso and Viviano (2014, p.1) wrote that recent studies on financial literacy found that “individuals seem to lack very basic knowledge of financial concepts that should in principle guide their financial decisions”. There are several research studies asserting that financial literacy is of vital importance for a number of reasons. Lusardi and Mitchell (2011a) and Fornero and Moticone (2011) argued that individuals with higher financial literacy levels tend to plan for their retirement. Babiarz and Robb (2014) also asserted that financial knowledge significantly impacted on saving for emergencies. Moreover, it was demonstrated that investors with high financial literacy achieved higher returns on the stock market because they were better at timing the market (Guiso & viviano, 2014).

Disney and Gathergood (2013) also highlighted that there is a strong link between financial literacy and consumer credit portfolios. The authors argued that the individuals, who borrowed money from financial institutions and showed low levels of financial literacy, paid a lot higher interest than those with higher levels of financial literacy. Huston (2012) also noted that consumers with higher levels of financial literacy were about twice as likely to pay lower interest on their credit cards and home loans. Thus, countries with populations with low levels of financial literacy especially those who are marginalised and vulnerable, are likely to face dire consequences in the future should these low levels of financial literacy not be addressed.

Mr Dube Tshidi, Chief Executive Officer of the Financial Services Board (FSB) wrote that “financial literacy is not only for the poor and uneducated. Even the educated can get themselves into financial trouble if they do not have a proper understanding of financial concepts, products and common-debt traps" (Roberts, Struwig, Gordon, Viljoen & Wentzel, 2012, p. 4). Taft et al. (2013) argued that the increase in variety of financial products and the global economy instability impacted on the decision making concerning financial matters. Hence, in the last decade, there has been a significant focus on financial management education globally (Organisation for Economic Co-operation and Development (OECD), 2013).

Post the financial crisis of 2008, a growing number of countries have instituted developmental programs intended to improve the financial literacy levels of their citizens. In South Africa, the government through the FSB has established initiatives to address these low levels of financial literacy around the country (Roberts et al., 2012). However, Bay, Catasús and Johed (2014, p.1) argued that financial literacy is a "concept that needs to be situated and studied in practice because the characteristics that constitutes financial literacy or those that apply to it, vary with time and place". Therefore, these national strategies addressing financial literacy challenges ought to emanate from informed and well researched studies such as this study. Furthermore, the process of implementation of these initiatives should be co-ordinated and tailored for targeted groups to ensure effectiveness thereof across the country. It is the aim of this research that insights derived from this study will contribute to the development of such strategies.

It has been argued that financial literacy is one of the key factors that impact on the success of small and medium enterprises (SMEs) globally. The low levels of financial literacy of entrepreneurs influence the SMEs ability to grow and achieve sustainable results. Nyamboga, Nyamweya, Abdi, Njeru and George (2014) highlighted that only one-half of SMEs survive for more than five years and only a few develop into real firms that prosper in terms of innovation and performance. Furthermore, Karadag (2015) asserted that poor financial management and knowledge were some of the major reasons why SMEs fail. The authors also highlighted that poor financial management was one of the factors that hinders SMEs from obtaining financial assistance from financial institutions and investors.

It is therefore, vital that entrepreneurs in the SME sector are equipped with ample financial management knowledge and skills to manage their enterprises successfully. Moreover, entrepreneurs have to learn to speak the same language as capital providers such as banks, venture capitalists and government if they are to grow their enterprises in matured firms. According to Greenspan (2002) as cited by Nyamboga et al. (2014, p.181), "financial literacy helps to provide entrepreneurs with financial knowledge necessary to make households budgets, initiate savings plans and acquire financial knowledge and skills to meet their financial goals".

There's voluminous amount of research studies (Toulova, Votoupalova, & Kubickova, 2015; Benzing, Chu & Kara, 2009) that have argued that a vibrant and flourishing SME sector play a key in the alleviation or curbing of most of the socioeconomic challenges faced by most countries. The high level of unemployment is one of the major socioeconomic challenges that South Africa is faced with. According to the South African Quarterly Labour Force Survey (Statistics South Africa, 2015), unemployment rate in the first quarter of 2015 increased to 26.4%, the highest since 2003. As shown in figure 1.1, the historical data shows that South Africa has always had high levels of unemployment rate. The international Labour Organisation (ILO) (2015) predicts that the South African unemployment rate will remain stubbornly high at around 25% in the next coming years.

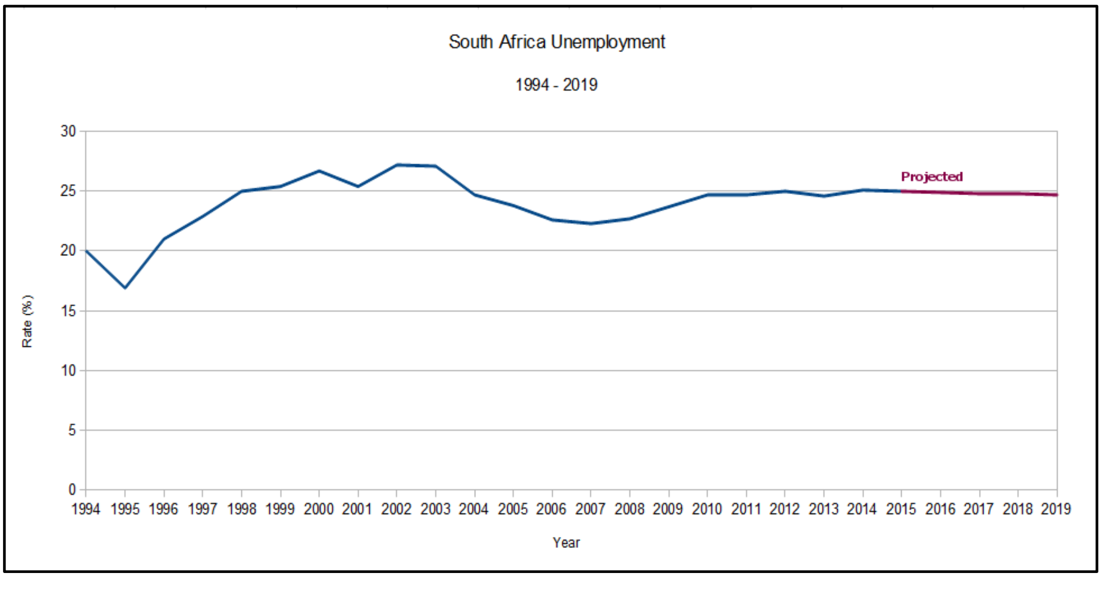

Figure 1.1: South African Unemployment Rate (ILO, 2015)

Most governments have been focusing on the development of high growth SMEs to drive job creation and promote social cohesion among their citizens (Ng & Kee, 2012; Karadag, 2015). There are countries that have successfully managed to establish the flourishing SME sectors. A study by Toulova et al. (2015) established that in the European Union economy, SMEs account for 99.8% of all economic entities and offer two thirds of employment. Czech Republic and the EU have more than 53% and 57% respectively of value added products produced by SMEs. Benzing et al. (2009) also found that UK, Europe, Japan, South Korea and Turkey economies were dominated by SMEs making up approximately 99% of the entire business community whilst creating between 59% and 80% jobs. It is therefore, imperative for countries like South Africa with such a high rate of joblessness, address all the obstacles and shortcomings impacting on the development and sustainability of the SME sector.

1.2 Problem statement

South African government has made commitment to improving financial literacy levels of the public at large. The Banking Association South Africa (BASA) (n.d.) however, suggested that there has to be “a more targeted, strengthened and co-ordinated effort” to ensure greater effectiveness and efficiency of these initiatives particularly those focusing on entrepreneurs. Huston (2010, p.308) also wrote that “a well-designed financial literacy instrument that adequately captures personal finance knowledge and application can provide insight into how well financial education improves the human capital needed to behave appropriately to enhance financial well-being”. It is therefore necessary that there is enough literature focusing on this subject where specific challenges and limitations faced by entrepreneurs regarding financial literacy are investigated and pertinent obstacles addressed effectively.

As mentioned previously, South Africa suffers from high rate of joblessness and slow economic growth, the government has acknowledged that small businesses can play a key role in addressing these challenges. The government through the National Development Programme (NDP) (National Planning Commission, 2012) has set itself a goal to reduce the unemployment rate down to 14% by 2020 and to only 6% by 2030. This means that an additional 11 million jobs have to be created between now and 2030. The NDP (National Planning Commission, 2012) goes on further to say, the service sector and the domestic orientated activities will have to create a large portion of these jobs, with at least 90% being created by small and expanding businesses. Job creation is of paramount importance to the South African government and the strategy to utilise small business as conduits for creating jobs is absolutely vital.

Therefore, the development of a flouring SME sector is crucial if government intends to use this sector to curb the unemployment rate. However, it has been argued that a large number of SME do not survive the first five years. According to Salazar, Soto and Mosqueda (2012), the lack of understanding of financial management concept is one of the main courses of failures of these enterprises. The lack of financial management includes unplanned growth, low strategic and financial projection, excessive fixed asset investment and capital mismanagement all of which are linked to financial literacy.

Jindrichovska (2013) also mentioned that the reason for SME failures during start-ups was that business owners themselves regarded production, services and marketing as the main priorities and often overlooked financial management of their enterprises. It is therefore, critical that all the key stakeholders including, government, private sector as well the providers of capital such as banks and venture capitalists, have a comprehensive understanding of the factors that prevent the SME sector from flourishing, particularly around financial knowledge and skills. This research study aims to provide such insights.

It has also been observed that South Africa suffers from low levels of entrepreneurship activity (TEA). According to the Global Entrepreneur Monitor (GEM) study (Singer, Amoros & Moska, 2014, p. 24), TEA is measured as a “percentage of individuals aged between 18 and 64 who are either a nascent entrepreneur or owner-manager of a new business”. South Africa’s TEA is significantly lower compared with other developing countries. Furthermore, the country’s early-stage entrepreneurial activity is also very low (7.0%), compared to other African countries such as Cameroon (37.4%), Uganda (35.5%) and Botswana (32.8%).

The country’s high level of unemployment is also exacerbated by the fact that the country’s youth don’t intend starting up new business. The entrepreneurship propensity in South Africa is significantly lower compared to other developing countries (Singer et al., 2014). South Africa also has high levels of non-entrepreneurial (63.9%) whereas countries such Zambia, Malawi and Uganda record less than 10% or less (Singer et al., 2014). Furthermore, South Africa has the lowest youth entrepreneurial propensity of only 23.3% compared with countries such as Uganda with 55.4% and Malawi (52.3%) and Namibia (44.1%). One can argue therefore argue that the youth in South Africa have to be encouraged to participate extensively in entrepreneurship in order to curb the increasing unemployment rate and addressing SME challenges is a great starting point.

It is also argued that SME are faced with challenges regarding access to finance and the lack of accurate book keeping and maintaining up to date financial records, especially financial statements have been highlighted as some of the contributing factors (United States Agency for International (USAID), 2009). Atkinson and Messy (2012) also argued that financial literacy is an essential skill for both consumers and business owners. Therefore, it is also critical to identify particular weakness and limitations regarding financial literacy that impact negatively on SMEs ability to obtain financial assistance from financial institutions.

In addition, education and training has been cited as a factor which plays a crucial role in entrepreneurial activity of most countries (Herrington, 2014). The more educated individuals are, the more they are likely to start a business. Therefore, entrepreneurs must be equipped with financial literacy knowledge early in their careers so that they are able to make sound financial decisions. Herrington (2014) further wrote that this finding strengthened the discussion around a strong need for better education and training in South Africa, more in particular among the youth if full benefits of entrepreneurship are to be realised. The findings of the study will enable policymakers and academics to improve the financial education programmes for the entrepreneurs.

1.3 Motivation for the study

Given the importance of financial literacy of entrepreneurs in the SME sector, there has been a proliferation of research studies focusing on the financial literacy of individuals including entrepreneurs. Although extensive research exists on this topic of financial literacy of entrepreneurs, majority of the studies however focused on developed markets and little focus has been paid to emerging markets such as South Africa. This sentiment is shared by Kotze and Smit (2008) and Oeifuah (2010) as cited by Fatoki (2014a) who said that there is limited research studies on financial literacy in general and particularly within the South African context.

Furthermore, the research studies in the South African context (Fatoki, 2014a; Roberts et al., 2012; Oseifuah, 2010; Shambare & Rugimbana, 2012; Kotzé & Smit, 2008) were predominately focused on assessing the financial literacy levels of entrepreneurs and the public in general. The perusal of literature also revealed that none of the research studies attempted to establish the impact of financial literacy of entrepreneurs on the economic success of their SMEs. Samkin, Pitu and Low (2014) also mentioned that literature investigating the financial skills and knowledge of SME owners to ensure sustainable income generation is limited. Fatoki (2014a) further pointed out that the empirical investigation on financial literacy of owners of SMEs and success thereof is also inadequate in South Africa. According to the best of the researcher’s knowledge, this will be the first empirical research study that seek to establish the impact of financial literacy of entrepreneurs on the economic success of SMEs.

1.4 Purpose of the study

It has been demonstrated that entrepreneurship and SMEs can play a crucial in the socioeconomic development of South Africa. Only entrepreneurship and SMEs can assist in alleviating and curbing the South African triple evils, namely, unemployment, poverty and inequality. There is a general view among academics that literature that combines the SMEs and financial literacy construct is limited especially in the South African context (Fatoki, 2014a).

The purpose of this research study is therefore twofold. Firstly, this research aims to fill the gaps and add to the growing body of literature on financial literacy of entrepreneurs in SMEs in emerging markets. The study will contribute to literature by exploring the extent to which entrepreneurs make use of financial literacy concepts to manage their enterprises. Understanding of these insights will assist policymakers and academics to develop specific training and developmental programmes aimed at assisting entrepreneurs to manage the financial matters of their enterprises more successfully.

Secondly, this research will also be useful to entrepreneurs themselves. The study will identify components of financial literacy that have significant impact on the performance the SMEs. In the current environment where SMEs are faced with financial resource constraints, the findings of this study will enable entrepreneurs to prioritise the adoption process of the components of financial literacy. The study will identify financial literacy components that affect economic success of SMEs. According to Greenspan (2002) as cited by Nyamboga et al. (2014), "financial literacy helps to provide entrepreneurs with financial knowledge necessary to make households budgets, initiate savings plans, and acquire financial knowledge and skills to meet their financial goals" (p.181).

1.5 Research objectives

The objectives this study aims to accomplish are:

- To understand the extent to which the entrepreneurs in the SME sector make use of financial literacy concepts
- To determine the impact of pursuing the financial literacy concepts on SME economic business success
- To establish if there is a relationship between the components of financial literacy and SME economic business success
- To discover the impact of demographics on the use of financial literacy concepts in SMEs

1.6 Structure of the research study

This report comprises of seven chapters. Chapter one presents an overview of the topic, the problem statement and purpose of the study. Chapter two presents an extensive literature review relating to financial literacy of entrepreneurs. The main constructs will be described in detail in order to provide context to the study. Chapter three will outline the theoretical framework and the research questions based on gaps from the literature review.

Chapter four will detail the methodology and the rationale for research design, sampling procedure and collection of data processes and the statistical analysis techniques used for data analysis. Chapter five will briefly discuss the sample used in this study. The results based on the data analysis will also be presented. The results with literature in mind will then be discussed in chapter six. Chapter seven will present conclusions drawn from the study and finally, recommendations to the key stakeholders will be made.

Chapter 2: Literature Review

2.1 Introduction

This chapter presents an extensive literature review relevant to the field of this research. The main constructs and related definitions regarding financial literacy of entrepreneurs in the SME sector will be elaborated upon to give meaningful context to this research study. The next chapter will then discuss research questions formulated based on identified gaps in literature.

2.2 Entrepreneurship and SME sector

Although entrepreneurship has been researched extensively over the years, the concept of entrepreneurship is still broadly comprehended and remains unclear (Anderson, Dodd & Jack, 2009). Lee and Hsieh (2010) acknowledged that scholars and academics do not have a universally accepted definition of entrepreneurship. Moreover, Troilo (2011) admitted that lack of a simple definition has an impact on the study of the entrepreneurship. Consequently, there are numerous definitions of entrepreneurship found in literature.

This includes a definition by Lee and Hsieh (2010, p.110) who believed "that entrepreneurship is the cause for discovering, driving new combinations of production factors and create social economy". However, Troilo (2011, p.159) viewed entrepreneurship as "a set of activities that involve the discovery, evaluation, and exploitation of opportunities to introduce new goods and services, ways of organizing markets, processes, and raw materials through organizing efforts that previously had not existed".

This research sought to focus on entrepreneurs as individuals, being owners or managers of the SMEs. This supports the views of Hjorth and Johannisson (2003) as cited by Anderson and Warren (2011) that entrepreneurship is an "enacted collective identity often portrayed as the individualized practice of singular individuals". Furthermore, Mogontha (2013) also argued that an entrepreneur is an individual who sees a potential opportunity and comes up with plans to achieve success in the market and earn profits. Supporting these sentiments, Hornaday and Bunker (1970) as cited by Strielkowski (2012, p.335), also wrote that an entrepreneur is "an individual who started a business, built it up where no previous business had been functioning and continued for a period of at least five years to the present profit making structure".

The literature has classified entrepreneurs into two groups, namely, social and corporate entrepreneurs. The social entrepreneurs are individuals who venture into business with a sole purpose of dealing with social challenges as opposed to generating a personal profit. Renko (2013) described these individuals as those who create new business with a primary motive of helping others, their communities, or simply assisting in economic development of their countries. These are individuals who are driven “to the start-up process by reasons that primarily stem from their willingness to see social change and the less fortunate succeed” (Renko, 2013, p.1047). Germak and Robinson (2014, p.5) believed that social entrepreneurs were “restless, mission-driven individuals that strive to change the world, their cities and their communities by implementing sustainable business ventures designed to create social impact”.

The corporate entrepreneurs on the other hand, target building businesses by identifying opportunities and turning them into competitive advantages. According to Pinchot (1985) as cited by Zali, Moezoddin, Rajaie, Daeijavad, and Ghotbi (2014, p.392), corporate entrepreneurship is referred to as a “development of internal markets and relatively small and independent units designed to create internal ventures and expand innovative staff services, technologies and methods within a large organization”. This study focuses on both groups of entrepreneurs.

There is abundance of studies (Renko, 2013; Chlosta, Patzelt, Klein & Dormann, 2012); Fini, Grimaldi, Marzocchi & Sobrero, 2012; Caliendo & Kritikos, 2012; Kirkwood, 2009) exploring the motivation factors for individuals becoming entrepreneurs. Renko (2013, p.1047) highlighted that entrepreneurial motivations often cited in literature included “self-realization, financial success, personal growth, status and autonomy”. The theory has classified these factors as pull or push factors. The push factors are characterised by those factors that are personal or external in nature whilst pull factors are those that attract individuals to starting a business after noticing a potential opportunity (Kirkwood, 2009).

Verheul, Thurik, Hessels and van der Zwan (2010) wrote that over the past years, new terms to classifying entrepreneurs have been introduced and these are necessity and opportunity entrepreneurship. Verheul et al. (2010) described the necessity entrepreneurship as due to push factors whereas opportunity entrepreneurship was as a result of pull factors. Block and Wagner (2010) concurred with these new constructs of entrepreneurship and argued that the opportunity entrepreneurs had much higher earning potential due to their ability to identify more profitable opportunities more accurately than the necessity entrepreneurship.

These descriptions of an entrepreneurship satisfy a theoretical framework relevant to this study because all the definitions included the critical aspects of entrepreneurs such as motivations, knowledge and skills. This research study however, adopted a more succinct and easy to operationalise definition of an entrepreneur. This is a definition by Greve and Salaff (2003) as cited by Troilo (2011, p. 159) who wrote that “an entrepreneur was someone who owns, launches, manages and assumes the risks of an economic venture’’.

The literature is abundant with studies confirming that entrepreneurship through SMEs is one of the key drivers of social and economic growth (Troilo, 2012; Aidis, Estrin, Mickiewicz, 2012; Prakash & Patawari, 2014; Decker, Haltiwanger, Jarmin & Miranda, 2014; Litwin, & Phan, 2013). Entrepreneurship fosters job creation and promotes the distribution of income more equitable (Aidis et al., 2012). Furthermore, Prakash and Patawari (2014) also proved that there was a positive relationship between SMEs and employment growth in both developing and developed economies. Benzing et al. (2009) as well demonstrated that there was a positive link between economic growth and entrepreneurship. Furthermore, Naqvi (2011) also argued that there is a strong connection between entrepreneurship and SMEs development.

Mogontha (2013) argued that although SMEs are considered fundamental and critical to economic development by most countries, there was still no consensus among governments on how to define an SME. Mogontha (2013) further highlighted that the concept of SME was mostly governed by laws and regulations of the particular countries. In South Africa, according the National Small Business Act no. 102 of 1996 (p. 2), a small business is defined as “a separate and distinct business entity, including cooperative enterprises and non-governmental organisations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub sector of the economy mentioned in column I of the Schedule and which can be classified as a micro-, a very small, a small or a medium enterprise by satisfying the criteria mentioned in columns 3, 4 and 5 of the Schedule opposite the smallest relevant size or class as mentioned in column 2 of the Schedule”.

The National Small Business Act no. 102 of 1996 (p. 2) further provided a definition of a small business as “any entity, whether or not incorporated or registered under any law, which consists mainly of persons carrying on small business concerns in any economic sector, or which has been established for the purpose of promoting the interests of or representing small business concerns, and includes any federation consisting wholly or partly of such association and also any branch of such organisation"

The SMEs in most cases were also quantitatively defined. Ali, Rashid and Khan (2014) wrote that capital assets, skills base and turnover were some of the measures used as differentiators between small and established businesses. SMEs were also segmented in terms of their size, GDP contribution, their export and overall contribution to the national economy. According to the National Small Business Act no. 102 of 1996, the small enterprises were generally classified as having between 10 and 49 employees with a turnover of between R6 million and R32 million. The medium business were categorised as having between 50 and 200 employees with turnover of between R13 million and R51 million, however this were dependent on the sector they operated in. This study classified and defined SMEs as enterprises having between 1 and 200 employees with a turnover of between R500,000 and R51 million.

2.3 Proposed concepts for measuring financial literacy

Huston (2010) acknowledged that a generally accepted definition of financial literacy among researchers did not exist and this has led to researchers developing their own meaning of the construct. Zuhair, Wickremasinghe and Natoli (2015) argued that a lack of a commonly used definition was indicative of the fact that financial literacy was multi-dimensional and had different meaning to researchers and academics.

In an attempt to demystify this construct, Huston (2010) conducted a comprehensive review on financial literacy research studies and found that of the 71 studies, 52 articles lacked the consistency in defining financial literacy and did not show how the construct was measured. Huston (2010, p.306) thereafter defined financial literacy as a "measure of how well an individual can understand and use personal finance related information".

Remund (2010, p. 279) as well reviewed a number of journal articles and summarised the various definitions of financial literacy and classified them into five categories, namely: "(1) knowledge of financial concepts (2) ability to communicate about financial concepts (3) aptitude in managing personal finances (4) skill in making appropriate financial decisions (5) confidence in planning effectively for future financial needs".

Remund (2010, p. 335), also proposed another definition of the construct as “a measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances, through appropriate, short term decision making and sound, long range financial planning, while mindful of life events and changing economic conditions”. This study accepted a definition of financial literacy provided by the USAID (2009). It stated that a financial literate entrepreneur was “someone who knows what are the most suitable financial and financial management options his or her business have at various growth stages of his or her business; knows where to obtain the most suitable products and services; and interacts with confidence with the suppliers of these products and services” USAID (2009, p.5).

Another challenge that is faced by researchers concerns the measurement of financial literacy levels of individuals. Currently, there are no standardised instruments for measuring financial literacy (Huston, 2010). Knoll and Houts (2012) postulated that the lack of a generally accepted measure of financial literacy was indicative of the fact the subject of financial literacy was relatively new and it showed that the topic was currently still being researched. Huston (2010) established that financial literacy levels of respondents in most research studies was conducted by employing questions relating to topics covering, insurance, credit cards, mortgages, retirement savings, budgeting and inflation.

Remund (2010) however, summarised the four most commonly used definitions of financial literacy as: (1) budgeting, (2) saving, (3) borrowing and (4) investing. The author concluded by edging the researchers to use these concepts as effective instruments for measuring financial literacy of individuals. Remund (2010, p.289) further argued that utilising these measures would assist “researchers to understand the dynamics of aptitude, which include short term decision making, long term planning, understanding the financial impact of becoming conditions beyond one’s control”. Accordingly, the three constructs, namely, (1) budgeting, (2) borrowing and (3) investing were adopted for this research study as the main concepts of financial literacy.

2.4 Financial literacy of entrepreneurs in the SMEs sector

Several studies (Karadag, 2015; Samkin et al., 2014; Abanis, Sunday, Burani & Eliabu, 2013) revealed that SMEs were faced with a number of challenges in managing their enterprise finances. The lack of financial management knowledge and skills were identified as one of the major causes of SMEs failure (Wise, 2013; Nyamboga et al., 2014). Karadag (2015) found that financial management practices that impacted on SME performance were working capital management, fixed assets management, financial reporting and control practices. Samkin et al. (2014) also confirmed these findings after investigating the financial literacy skills necessary to manage a small New Zealand business. The authors established that maintaining records of income received, managing debtors and credit sales, managing outgoings and control of expenses were critical in running a successful business.

Karadag (2015) also conducted an exploratory study to establish the role of financial management in SMEs in Turkey. The authors established that financial management practices that impacted on SME performance were working capital management, fixed assets management, financial reporting and control practices. These research findings were consistent with the study conducted by Abanis et al. (2013) who investigated financial management practices used by SMEs in Western Uganda. They also found that financial management practices entailing working capital management, investment, financing and financial reporting had an influence on the performance of an SME in Uganda. Their study also revealed that the extent of financial management among entrepreneurs was very low.

Wise (2013) contributed to the topic by discovering that financial literacy also had an impact on new venture survival. It was revealed that the adoption of financial tools such as financial statements and financial ratios led to an increased frequency of generating financial statements and this had a positive impact on loan repayment and decreased the likelihood of new venture failure. Financial literacy is also believed to have an impact on business credit management. Nyamboga et al. (2014) investigated the influence of financial literacy on SME being able to repay their loans. The study looked at the impact of book keeping skills, credit management and budgeting skills on loan repayment. The study focused on 30 SMEs who were beneficiaries of the Equity Group Foundation Training Program in Ngara, Nairobi. The authors found that increased level of financial literacy through training of SMEs in respect of book keeping; credit management and budgeting had significantly increased the ability of the SMEs to repay the loans.

It is evident that financial literacy is fundamental in the management of business finances. It can be argued therefore, that businesses with owners or managers who are more financial literate were able to achieve positive economic results in their SMEs.

2.5 The use of financial literacy concepts by SMEs

2.5.1 Borrowing as a source of capital

The borrowing activities and financing of SMEs have been a topic of interest for academics and policymakers due to the SMEs importance in the economic development of any country. The SMEs require adequate and timely access to finance at each stage of their growth. The SMEs need financial capital to purchase fixed and current assets to ensure their sustainability and competitive advantage (Fatoki, 2012). However, access to finance is acknowledged as one of the major obstacles to the development of these small enterprises (Beck, Demirgüç-Kunt & Pería, 2011; Dwyer & Kotey, 2015). According to Lucey (2010) as cited Fatoki (2012), SMEs only have two primary sources of capital, equity and debt.

Mateev, Poutziouris and Ivanov (2013) wrote that the two of the theories widely cited in corporate finance literature are the trade of theory and the pecking order theory. In the trade off theory the benefits of debt financing are evaluated against the cost of debt; where benefits of debt included tax deductible and cost of debt entailed interest rate or cost of being bankrupt. According to the trade of theory, there is an optimal capital structure for each firm. The management of the enterprise ought to aim at maintaining an optimal debt to equity ratio. Modigliani and Miller (1963) as cited by Fatoki (2012) advocated for firms to opt for debt as opposed to equity. The authors argued that interest paid on debt were tax deductible whilst the dividends payments did not offer similar tax benefits.

Mateev et al. (2013) further wrote that the pecking order theory was prevalent where there was information asymmetry in firms amongst the internal stakeholders such as shareholders or managers and the external stakeholders, being investors. The cost of issuing equity then gets to be the deciding factor. The process becomes much more involved as it is not just comparing costs and benefits of debt. This theory predicts that there is hierarchy of financing sources, where firms choose to use their retained earnings first, then debt and equity as a last resort.

Dwyer and Kotey (2015, p.115) posited that SMEs preferred to use internal equity to debt and debt to external equity. Hyz (2011, p. 163) wrote that "the main sources of external capital for small and medium-sized enterprises are the so-called non-banking sources of financing (trade credit, lease, factoring, franchising, loans from the non-banking sector) and bank loans (short and long-term)".

Hyz (2011) argued that finance sourcing was based on the firm's development stage. The author further argued that during the early growth stages most enterprises rely on capital provided by their owners or families members. It is only during the further phases of development where the enterprise can source finances from its retained earnings. Only medium sized firms may have easier access to bank loans compared to smaller firms in the SME sector (Hyz, 2011).

La Rocca, La Rocca and Cariola (2011) also established that SMEs gradually adjusted their capital structure as they progress through the enterprise life cycle. Firms accomplished this by substituting debt for internal capital. The authors further wrote that mature firms were inclined to have higher profitability which may result in the owners being less dependent on debt whereas younger enterprises would be more dependent on debt as an external source of capital. Dogra and Gupta (2009) in their study of capital structure of SMEs in Punjab found that the majority of respondents preferred to use their own equity as opposed to borrowing funds.

Hyz (2011) further argued that in most economies, commercial banks provided majority of the capital to the SMEs. Due to their size, Hyz (2011) wrote that SMEs were unable to participate in the capital market to raise funds. This resulted in commercial banks becoming the only real source of additional funds for these enterprises. Wu, Song and Zeng (2008) also asserted that SMEs tended to use commercial lenders, especially institutional lenders as a source of debt. Deesomsak, Paudyal and Pescetto (2009, p.5) argued that firms should in fact choose to borrow money to finance assets, and more importantly firms ought to decide on the maturity of debt financing. Deesomsak et al. (2009, p.5) defined debt maturity "as the proportion of long-term debt to total debt, where long-term debt includes debt of more than one-year maturity". SMEs rely heavily on bank debt and debt providers manage their risk of lending to SMEs by ensuring shorter debt maturity.

Another source of funding available for SMEs is the venture capitalists. However, equity whether in terms of venture capital or capital market was difficult to be obtained by SMEs (Alperovych, Hübner & Lobet 2015). The venture capitalists are financial intermediaries. Abdulsaleh & Worthington (2013, p.41) wrote that "venture capital is that form of financing in which funds are raised from investors and redeployed by investing in high-risk informationally opaque firms which for the most part are young or start-up firms". Venture capital was however considered by academics and professionals as a key driver ensuring success of entrepreneurs (Alperovych et al., 2015).

Many Governments have also widely recognized that the SMEs were faced with numerous financial constraints affecting their development and growth (Abdulsaleh & Worthington, 2013). Thus most governments have established initiatives and programmes aimed at promoting easier financial access by the SMEs. These include "credit guarantee loans, factoring programs and subsidised fees" as typical examples (Abdulsaleh & Worthington, 2013, p.45).

2.5.2 Budgeting activities by SMEs

Kalekye and Memba (2013, p. 2362) posited that "budgeting incomes and expenditure is the most important factor of business financial management and in order to do it correctly financial literacy knowledge is vital". According to Horngren et al. (2005) as cited by Østergren and Stensaker (2011, p. 152) budget is described as "an integral part of management control systems that aims at promoting coordination and communication among sub-units within the company, provides a framework for judging performance and finally motivating managers and other employees". Warue et al. (2013) also added that budgets were a reflection of management expectation regarding the firm's income, cash flow and financial position in monetary terms. Financial budgets are forecasting tools utilised to estimate the future business performance. Hoe (2010) however, stated that budgeting in particular capital budgeting was among the least practiced by the majority of the SMEs. Pietrzak (2014) argued that operational budgeting was the most used method of management accounting and over 90% of enterprises in both developed and developing markets made use of this tool.

Budgeting is an important facet of business environment and it is considered the most vital tool for management control. Budgets are key in evaluating managerial performance (Pietrzak, 2014). Furthermore, budgets were used by organisation for planning, coordinating, evaluation, motivation and performance management. Cohen & Karatzimas (2011) argued that the limited use of budgets as part of performance evaluation was due to the fact that the human resource departments had limited involvement during budgeting. Warue et al. (2013) argued that one of the reasons why SMEs fail was lack of budgeting

In their study of management accounting practices among Malaysian firms in SMEs sector, Ahmad and Mohamed (2012) found that majority of the respondents indicated a high utilisation of financial budgets. The respondents also revealed that 12 months was their budgeting time frame. Rickards (2008) also conducted a survey among SME practicing budgeting in western and Central Europe. They discovered that more than 40% of those surveyed only reviewed their strategic goals at least once a year, while majority of them only did so less frequently.

There has been numerous criticism levelled against traditional budgeting methods because they were mostly influenced by the past performance of the enterprise and they paid little attention to the future markets condition changes. As a result, in the last years there has been development of alternate methods of budgeting. The alternate methods included beyond budgeting, better budgeting, rolling forecasts and activity-based budgeting.

According to Pietrzak (2014, p.27) the “primary advantage of activity-based budgets is that costs can be more accurately associated with activities, making the planning process more precise and corrections more effective”. Pietrzak (2014) asserted that companies using this approach reported a number of benefits, including: establishing more realistic budgets, improving accuracy in identifying resource needs, better linking of costs to outputs and allocating more precisely the costs to staff responsibilities.

Another method that is supported by management students was the principle called beyond budgeting. Østergren and Stensaker (2011) argued that beyond budgeting was a new form of control that consists of activities similar to budgeting, such as target setting, forecasting and resources allocation. However, the main difference was that no actual budget was allocated to any activity in advance.

In their study of companies that operate without budgets, Østergren and Stensaker (2011) found that beyond budgeting promoted more horizontal integration as managers and subordinates made much more contact with one another and those working in the financial department such as financial controllers became more empowered.

Zeller and Metzger (2013) argued that most leading organisations made use of rolling forecast either as a replacement of the traditional budgeting in order to navigate through the complex business environment. However, Ahmad and Mohamed (2012) discovered that continuous rolling budgets were only undertaken by 50% of the respondents in Malaysian SMEs. The authors argued that rolling budget was infeasible because SMEs did not have adequate IT support systems. The authors further asserted that rolling budgeting was only possible with efficient IT systems that enabled entrepreneurs to improve the quality of their planning and controlling information.

According Diamond & Khemani (2006) as cited by Warue et al. (2013) budgeting process in developing countries was either conducted manually or supported by very old and outdated software applications and hardware. The authors also noted that this had a negative impact on the proper functioning of the process due to lack of reliable and timely data for budgeting processes.

2.5.3 Investing activities by SMEs

Although access to capital was still a major challenge facing small businesses, investment practices remained critically important to SMEs. Prakash and Patawari (2014) argued that SMEs investment in fixed assets was vital in that it reduces investors' risk, lead to reduction in operating expenses and promoted sustainable jobs in the long run. In line with the pecking order theory firms chose to use the retained earnings to fund their growth plans, resulting in limited funds to investment in other portfolios.

However literature is abundant with studies showing that SMEs do conduct investment activities as part of business management. Kohn (1997) as cited by Li and Hu (2013) established that US SMEs were investing internationally on research and development (R & D) based technological enterprises. Voigt and Moncada-Paternò-Castello (2012) established that on average USA SMEs were by far more R & D intensive than EU SMEs.

Stock market is also a key investment avenue for entrepreneurs who have surplus cash. Abanis et al. (2013) however argued that due to limited capital for SMEs, entrepreneurs find it difficult to build up enough reserves in order to access equity markets especially during the early stages of development. The investment in the stock markets is also influenced by financial literacy level of the entrepreneurs themselves. Van Rooij, Lusardi and Alessie (2011) established that the individuals with lower financial literacy level were unlikely to invest in stock. This finding was confirmed by Guiso and Viviano (2014) also establishing that households participation in the stock market increased considerably with high levels of financial literacy.

Another key factor that is critical to SME performance was the information and technology (IT) investment. Yang, Xun and He (2015) wrote that firms ought to investment in IT systems. IT assets included computers and software whilst IT intangible resources included the skills and knowledge developed over time in administering the IT hardware systems (Yang et al., 2015). Bayo-Moriones, Billón & Lera-López (2013) established that there was a positive relationship between investing and adopting ICT and the firm's performance. Furthermore, Rickards (2008) found that over 90 per cent of the SMEs regarded good IT support as a key success factor for running their enterprises.

The e-commerce provides endless opportunities to SMEs. Ashurst, Cragg & Herring (2011) established that although the exploitation of e-business by SMEs has been lagging, SMEs that focused on e-business achieved positive results through innovation and integration of various business processes. Feeny (2000) as cited by Yang et al. (2015, p. 587) argued that "web-based technologies enable SMEs to compete head-on with their larger counterparts by permitting them to reduce information asymmetry, connect to customers, suppliers, and network infrastructure at low cost, and offer new marketing and sales channel".

Human capital development is another critical area in which SMEs invested. Studies have found a positive relationship between firm's human capital development and the firm's performance. Chuluunbaatar, Kung and Luh (2011) defined "human capital as knowledge, skills, competencies, abilities, attitude, talents and experience used by an individual to provide value to a firm, contribute to achieve the firm's goals, and support the firm's success" (p.34). Chuluunbaatar et al. (2011) further wrote that appropriate investment and human capital usage within companies had a positive impact on performance, productivity and profitability of the firms.

The literature confirmed that SMEs did make use of financial ratios when making investment decision. Abanis et al. (2013) commented on the findings of a study by Block (1997) where a survey of 232 small businesses was conducted in the USA. The study established that payback period was predominately used to evaluate the viability of capital projects. The study further revealed that majority (51%) made use of payback period whilst 30% indicated that they used accounting rate of return. Only 5% revealed that they made use of net present value and only 2% revealed that they considered internal rate of return. However, due to complexity of some these financial evaluations, Hoe (2010) suggested that SMEs ought to employ the services of a professional account such as a financial manager who will be able to assist the entrepreneurs with such financial matters in order to create more value for the firm.

2.6. Demographics as determinant of financial literacy of entrepreneurs

Hoe (2010) wrote that majority of the SMEs were owner managed and most of the owners did not have formal qualifications to manage their businesses. The manner in which they managed their business finances was therefore, dependent on their education, practical experience and any prior training. This is a cause for concern as the entrepreneurs held key positions in the firms they have created (Ahmad, Halim & Zainal, 2010).

2.6.1. Education level of entrepreneurs

A number of other studies (Samkin et al., 2014; Taft et al., 2013; Lusardi & Mitchell (2011a; Fernero & Monticone, 2011; Huston, 2012) established that educational levels were positively correlated with high financial literacy levels. Sucuahi (2013) highlighted entrepreneurs with college level education as a minimum showed higher financial literacy level compared to those with lower educational level.

Dogra and Gupta (2009) also established that the main factor which impacted on the decision to borrow funds for the business was education. Dogra and Gupta (2009) also posited that individuals with higher education levels were reluctant to apply for credit for their enterprise. Sena, Scott and Roper (2012) demonstrated that there was a noticeable difference between women entrepreneurs with formal education qualification and those who did not have formal education when it comes to sourcing external funding to start a business.

2.6.2 Gender of entrepreneurs

Gender was also another important determinant factor of financial literacy. The literature is also abundant with studies focusing on financial literacy by gender. According to Lusardi and Mitchell (2011a, p. 504), “there is a systematic and persistent difference in financial literacy between men and women” worldwide. Samkin et al. (2014) and Fernero and Monticone (2011) concurred with this sentiment, they found that gender was a determinant factor in financial levels of individuals globally.

Lusardi, Mitchell and Curto (2010) found that the difference between women and men’s financial literacy levels was of significance. Lusardi and Mitchell (2011a) highlighted that that low levels of financial literacy among women was common throughout the world and generally women appeared to know less about financial matters.

Although Agier and Szafarz (2013) found that loan approval rate in Brazil was gender neutral, it was revealed that a glass ceiling on loan size existed. The authors further highlighted that women especially those with larger projects were affected negatively by this phenomenon. Sena et al. (2012) established that men were more likely to seek external funders than women.

There has been divergent views on why women appear to have low financial literacy levels. Almenberg and Säve-Söderbergh (2011) suggested that financial literacy of women was due to the fact they often did not make economic decisions in their homes.

2.6.3 Age of entrepreneurs

It is of critical importance as well to know if financial literacy is affected by the age and experience of entrepreneurs. Nofsinger and Wang (2011) explained that experience had a positive impact on how much external funds were granted to the firm. The entrepreneur experience was in most cases factored in during the evaluation of creditworthiness.

There have been numerous research studies measuring financial literacy of both the young and old individuals. Lusardi and Mitchell (2011b) theorised that the “life cycle profile of financial literacy will be hump-shaped” (p. 17), with financial literacy being the lowest among young and old individuals.

The research studies (Lusardi & Mitchell, 2011b; Rooij et al., 2011b; Fernero & Monticone, 2011; Klapper & Panos, 2011) that focused on financial literacy and retirement planning have consistently concluded that the older generations were among the highest with low levels of financial literacy. The impact of age, gender and level of education relating to the use of financial literacy will also be affirmed by this research study.

2.7 Measuring economic success of SMEs

Measuring of small business success has always been a challenge for researchers in that business owners themselves defined their own success in different ways. Business owners tend to use their own personal value orientations as a measure of business success as opposed to the financial or economic indicators. However, the most frequently used measurements of business performance found in literature were profitability, growth, innovation and firm survival (Gorgievski, Ascalon & Stephan, 2011).

Gorgievski et al. (2011) argued that research should focus on a more holistic approach to measuring business success by including both financial and non-financial indicators. The authors further pointed out that such measurements must include both business performance such as economic growth and other criteria that business owners themselves deemed to be a success. Indicators such as work life balance or giving back to community are some of the factors critical to business owners.

Strielkowski (2012) however rejected this view and suggested that only the objective indicators of business success should be adopted over the subjective measures when measuring business success. The business success must be equated to the achievement of positive economic growth indicators such as: profitability and growth in number of employees (Strielkowski 2012). In line with Strielkowski's (2012) view of business success, this research study made use of objective measurement of business success as represented by growth in terms of both annual turnover and number of employees.

2.8 Conclusion

This chapter presented an extensive review of the literature around the importance of entrepreneurship, SME development and financial literacy of entrepreneurs. A number of definitions describing what an entrepreneur is where presented in this chapter. This study however, defined an entrepreneur as someone who owns and/or manages the enterprise to achieve economic success.

The literature also demonstrated the importance of SMEs in dealing with social and economic challenges faced by most countries. These socioeconomic challenges including high number of unemployment, extreme levels of inequality and abject poverty, and these challenges can be curbed by a flourishing SME sector. In line with the definition of SME by the National Small Business Act no. 102 of 196, this study adopted a definition of an SMEs as an enterprise which has between 1 and 200 employees with a turnover of between R500,000 and R51 million.

The literature demonstrated that SMEs were faced with a number of challenges and highlighted the lack of financial management knowledge and skills as the reason for SME failures. Financial management skills cited in literature included maintaining records, management of debt and credit skills, capital management, financial reporting and control practices to mention a few. It was argued that high levels of financial literacy increased SME's ability to be stringent in effecting control regarding financial matters of the business. Financial literacy was identified as one of the reasons why SMEs did not achieve sustainable economic results.

The literature however, presented the researcher with a challenge in that; there is no accepted definition of financial literacy among researchers. Furthermore, there are no standardised measurements of financial literacy. This study accepted the definition of financial literacy by USAID (2009). The literature also suggested various means of measuring financial literacy of individuals. However, this study will adopt the proposed measurements by Remund (2010). The extensive research conducted by Remund (2010) revealed that the most used operational definitions on financial literacy were (1) budgeting, (2) investing, (3) saving, and (4) borrowing. This research used the most critical concepts of financial literacy as budgeting, investing, and borrowing. Remund (2010) believed that saving as a financial literacy concept will be more applicable to the general public and less to entrepreneurs in the SMEs sector. Instead of saving money, SMEs would rather invest it in their enterprise growth strategies.

A number of studies revealed that SMEs require adequate and timely access to finance at each stage of the life cycle. The literature revealed that SMEs preferred debt to equity. Most entrepreneurs feared the loss of control of their businesses if they received equity from investors. Thus, studies demonstrated the various methods followed by SMEs when conducting borrowing activities. This included sourcing funds from owner's saving, family, friends and commercial banks. This borrowing phenomenon will be tested on the SMEs in South Africa to establish both similarities and differences.

Budgeting was highlighted as an integral part of management control systems of the enterprises. The literature presented a number of challenges faced by SMEs regarding budgeting. Issues such as budgeting being used as part of performance contract for employees, information and technology systems used for conducting budgeting process, use of traditional budgeting versus other methods such rolling budgets, beyond budget and activity based costing highlights the plight faced by SMEs. The literature also discussed investment activities by SMEs. The R & D projects, fixed assets, information and technology (IT) were some areas that literature revealed that SMES invested in. These practices and challenges highlighted in the literature will also be verified by this study on the South African SMEs.

Majority of the SMEs are owner managed and most of them do not have qualifications necessary to manage their SMEs. Thus the manner in which the entrepreneurs manage their businesses was dependent on their experience and any prior training. Consequently, demographic factors would impact on the financial decision making process thereby affecting the performance of the enterprise.

The literature presented various constructs for measuring economic success of the SMEs. The divergent views advocated for the economic success of the SMEs to be measured based on financial and non-financial indicators. Non-financial measures included work life balance and giving back to community and financial measures related to profitability and growth in number of employees. This study opted to use more objective measurements of business success as growth in terms of both the turnover and number of employees.

Financial literacy has been cited as one of the key factors that impact on the success of SMEs globally. The low levels of financial literacy of entrepreneurs influence the SME's ability to grow and achieve sustainable results. The SME sector is crucial for countries such as South Africa. Therefore, financial literacy challenges and shortcomings experienced by the entrepreneurs in the SME sector have to be well understood so that initiatives can be implemented to address them. This research study will contribute to the body of knowledge on this subject of financial literacy in South Africa.

Chapter 3: Research Questions and Propositions

3.1 Introduction

This chapter will discuss the research questions the study aims to answer in order to fill the gaps in literature. Saunders and Lewis (2012) wrote that research questions have to be coherently linked to the literature and must also seek to provide new insights in to the research field. Researchers should avoid asking easy questions that are likely to only require descriptive answers (Saunders & Lewis, 2012). Figure 3.1 presents a basic conceptual framework for this study.

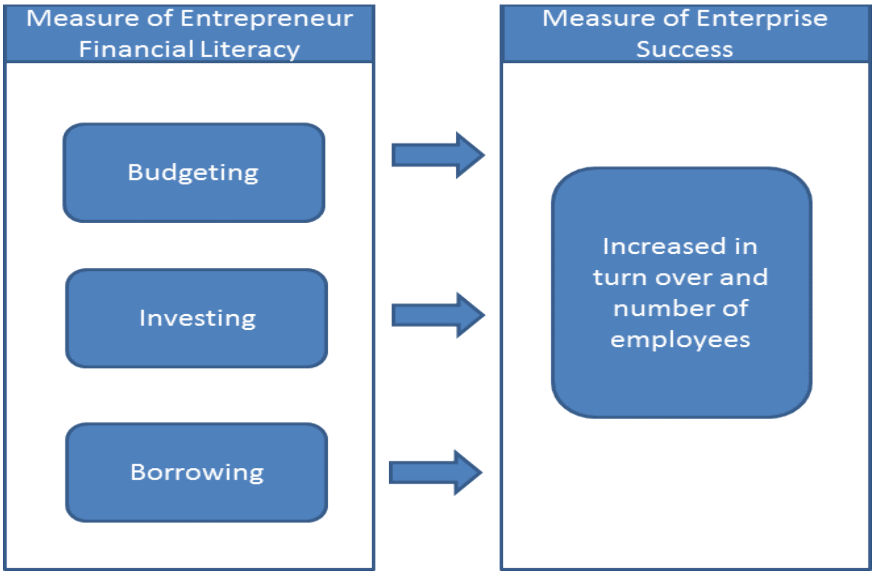

Figure 3.1: Research conceptual framework to be tested in this research study (Author, 2015)

3.2 Research question 1:

What is the extent to which the entrepreneurs in the SMEs sector pursue financial literacy concepts in managing their business finances?

The researchers (Guiso & Viviano, 2014; Lusardi & Mitchell, 2011a; Fornero & Moticone, 2011) wrote that the financial literacy levels of entrepreneurs were very low in both developing and developed markets. There have been a number of divergent views regarding the use financial literacy concepts by entrepreneurs in managing the business finances. Ahmad and Mohamed (2012) and Pietrzak (2014) argued that operational budgeting was the most frequently used method of management accounting utilised by enterprises.

However, Abanis et al. (2013) and Fatoki (2014b) asserted that most owners of micro enterprises did not make use formal financial planning, budgeting and control systems in their businesses. This research question therefore seeks to establish the extent to which entrepreneurs in the emerging markets such as South Africa make use of the financial literacy concepts.

3.3 Research question 2:

What is the impact of pursuing financial literacy concepts on economic business success of SMEs?

The literature revealed that SMEs were faced with a number of challenges in managing their enterprises finances (Karadag, 2015; Samkin et al., 2014; Abanis et al., 2013). The lack of financial knowledge and management skills has been identified as one of the major causes of SMEs failure (Wise, 2013; Nyamboga et al., 2014). This research question seeks to empirically establish the impact of pursuing the financial literacy concepts on SMEs economic success. The success will be measured by turnover and number of employees. Strielkowski's (2012) asserted that business success has to be based on objective and positive economic growth indicators such as profitability and growth in number of employees.

3.4 Research question 3:

What is the relationship between each concepts of financial literacy and economic business success of the SMEs?

The literature identified several financial literacy concepts that affect performance of small business (Wise, 2013; Nyamboga et al., 2014; Samkin et al., 2014). These include capital management, financial reporting and control practices, record keeping, management of debtors and credit sales, management of outgoing and control expenses. This research question aims to establish the relationship between the use of the three components of financial literacy, namely: budgeting, investing and borrowing and successes of SMEs.

3.5 Research question 4:

What is the impact of demographics of entrepreneurs on the use of financial literacy concepts?

Hoe (2010) alluded to the fact that majority of the SMEs were owner managed and most of them do not have necessary qualification to manage their enterprises. Sucuahi (2013); Samkin et al. (2014); Fernero and Monticone (2011); Lusardi et al. (2010) and Lusardi and Mitchell (2011a) and Huston (2012) postulated that demographics influenced financial literacy levels of individuals globally. This study will also ascertain the demographic factors that impact on the use of financial literacy in the SME sector.

3.5 Conclusion

This chapter outlined the research questions this study endeavours to answer so that the research objectives can be accomplished. Through these questions, the study aims to understand the use of financial literacy concepts by entrepreneurs in the SME sector. The next chapter will outline the methodology the study followed during the collection and analyses of data.

Chapter 4: Research Methodology

1.1 Introduction

The data required to answer the research questions had to be collected and analysed by the researcher. This chapter describes in detail the method followed during the data collection process. The topics such as research design and rationale, population of relevance, sampling method, sampling size and unit of analysis are also included in this chapter. The chapter also specifies the data analysis processed followed so that research questions can be answered.

1.2 Research design and rationale

Bhattacherjee (2012) explained that a research design is a comprehensive plan for collecting data for a research project. Pinsonneault and Kraemer (1993, p. 81) further wrote that “a research design is a strategy for answering the questions and testing the hypothesis that stimulated the research in the first place”. Kothari (2011, p. 31) also described “research design as an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure”.

This research study was quantitative and descriptive in nature. Harwell (2011) wrote that quantitative research method is a suitable when research seeks to maximize objectivity, replicability and generalizability of findings. Saunders and Lewis (2012) also highlighted that descriptive study is ideal if a research aims to produce an accurate representation of persons, events or situations. The purpose of this study is to understand the extent to which entrepreneurs pursue financial literacy concepts in managing their business finances. The study also aims to establish the relationship between the use of financial literacy concepts and economic success of the SMEs. This study seeks to ascertain facts and not prove or test any theory, hence a quantitative and descriptive design was appropriate for this study.

1.3 Population of relevance

Saunders and Lewis (2012, p.132) defined a “population as a complete set of group members”, be it people, employees, organisations, places, etc. The population of relevance for this research study comprised of owners or managers of SMEs conducting business with Anglo American Coal South Africa within the Emalahleni and Gert Sibande municipality district in Mpumalanga Province. Anglo American Coal

South Africa has ten Coal mines in South Africa of which six are located in the selected districts relevant to the study. The selection of this population was based on convenience because information such as owner's details, contact numbers and location could easily be accessible by the researcher. However, this population comprised of a diverse group of entrepreneurs in terms race, services offered to the mines, number of years in business and management structures. The entrepreneurs were able to provide relevant data to the study.

As outlined in the previous chapters, a definition of SMEs as per National Small Business Act no. 102 of 1996 was adopted and the SMEs were classified as enterprises having between 1 and 200 employees with a turnover of between R500,000 and R51 million. Furthermore the enterprises had to conduct business in the Gert Sibande and Emalahleni districts in Mpumalanga Province. A list of with 4,680 SMEs together with contact details of the SMEs was sourced from Anglo American Supply Chain.

4.3 Sampling Method

Kothari (2011) defined a sampling design as a plan where researcher outlines the steps or procedure that will be followed in order to obtain a sample from a given population. Zikmund (2003, p.369) defined sampling design as a "process of using a small number of items or parts of a larger population to make conclusions about a whole population". Pinsonneault and Kraemer (1993) also highlighted that sampling was about selecting individuals from a population so that the phenomenon established from a sample could be generalised to the entire population.

This research study made use of probability sampling because the researcher had a sample frame. Saunders and Lewis (2012) argued that this sampling technique should be followed if a sample frame exists. Accordingly Saunders and Lewis (2012, p.133), a sample frame is a "complete list of all the members of the total population". Pinsonneault and Kraemer (1993) pointed out that the sample frames were randomly discussed by researchers even though sample frames were considered more important than the sample itself. As discussed previously, a database was sourced from Anglo American Coal Supply Chain. Based on the definition of SMEs in this study, the number of SMEs that met the criterion was found to be 564. The questionnaire also contained questions designed to ensure that SMEs participating in the study met the criterion. Data collected from the SMEs with a number of employees more than 200 and an annual turnover greater than R51 million were excluded from the data analysis. The probability sampling was therefore the most appropriate method of sampling because the sample frame existed.

Saunders and Lewis (2012) discussed in detail the various probability sampling techniques used in research. The methods discussed were; simple random sampling, systematic random sampling, and stratified random sampling. With a complete sample frame, a simple random sampling method was followed. According to Saunders and Lewis (2012, p. 135), "simple random sampling is a type of probability sampling in which each member of the population has an equal chance of being randomly and included in the sample. Each member is usually selected using random numbers". Each qualifying SMEs was assigned a number from 1 to 564 and a sample was generated by selecting a random number between 1 and 564.

4.4 Sample size

A sample size is regarded as an optimal number of respondents required to participate in a research study (Saunders & Lewis (2012). In order to decide on the sample size, researcher ought to be mindful of the fact that the sample size needs to be representative of the population statistically. Saunders and Lewis (2012) suggested that the higher the sample size the more certain that the sample will represent the population accurately. According to Kothari (2011), in determining the optimum sample size, requirements of efficiency, representativeness, reliability and flexibility must be taken into cognisance.

However, Saunders and Lewis (2012) recommended that in order to minimise false results, a statistical tests requires a sample of at least 30 respondents. O'Rourke, Psych and Hatcher (2013) indicated that a sample has statistical power when the sample itself is large enough to display the actual characteristics of the population. As discussed in previous section, the sample was randomly generated from a total of 564 SMEs and a total of 100 SMEs were selected to participate in the study. The study aimed for at least 51% response rate, Pinsonneault & Kraemer (1993) wrote that a response rate of below 51% was inadequate for social science research studies.

4.5 Unit of analysis

Another item in research methodology which is of critical importance is the determination of the unit of analysis (Pinsonneault & Kraemer, 1993). Bhattacherjee (2012, p. 9) described a unit of analysis as ‘‘persons or objects that are the focus of the investigation". Unit of analysis can be categorised into different units including individuals, groups, organizations, countries, technologies and objects (Zikmund, 2003). It is important for researchers to understand the unit of analysis due to the fact that it informs what type of data should be collected and who the data should be collected from (Bhattacherjee, 2012).

This research study made use of entrepreneurs being owners or managers of SMEs as the unit of analysis. The research study focused on eliciting views and opinions of entrepreneurs on financial literacy instead of their respective enterprises. The entrepreneurs themselves were involved with the enterprises financial management and were able to give a fair view of the extent to which they utilised concepts of financial literacy in managing their business finances in order to achieve economic success.

4.6 Research data gathering

Before selecting a data collection method, a decision on which type of data to be used for the research study needed to be made first. According to Kothari (2011) there are two types of data, i.e. primary and secondary. The primary data are those that have been collected afresh for the purpose of the study whilst secondary data would have been collected by someone else for a different study. This research study required the use of primary data and hence fresh data had to be collected.

Kothari (2011) also stated that there are different methods for collecting such primary data. These included (i) questionnaires, (ii) semi-structured or unstructured interviews and (iii) observation method. The primary data for this research study was collected through a questionnaire method in a research survey format. Pinsonneault and Kraemer (1993, p. 77) defined "a survey research as a quantitative method, requiring standardized information from and/or about the subjects being studied, where the subjects studied might be individuals, groups, organizations, or communities; they also might be projects, applications, or systems".

The surveys are generally used in most social science research studies due to their reasonable easiness to understand and to complete (Pinsonneault & Kraemer, 1993). Furthermore, the research survey enables the researcher to collect data efficiently and economically. A research survey aimed at accomplishing the objectives of the study was developed by the researcher. Malhotra (2009) cited some advantages and disadvantages for using this method. A survey is simple to administer, data is reliable as it offers respondents specific and limited alternatives. This method enables the researcher to easily sort, code and analyse the data. The disadvantages however, are, respondents might find volunteering personal information inappropriate. Moreover, the survey does not take into account the human aspects such emotions and feelings, and language used in the surveys is always a challenge which can have the impact on the validity of the study.

The information was elicited from entrepreneurs by asking them standard questions based on financial literacy concepts (1) budgeting, (2) borrowing and (3) investing in a questionnaire format. Saunders and Lewis (2012) described questionnaires as being good for collecting data about the same topic from a large number of respondents. Saunders and Lewis (2012) also highlighted different types of questions that can be used in a questionnaire. This research study used a combination of the following question types in order to gather the research data.

1. Rating type questions: where respondents were expected to give an opinion or belief
2. Category type question: where the respondents answer only needs to fit into one category

The study did not utilise or adopt any questions from existing literature as no questions relevant to this study were found during the extensive review of past research studies. Thus, new questions had to be developed based on existing literature on financial literacy of entrepreneurs.

The questionnaire was divided into three categories, namely, demographics, business success and financial literacy concepts (i.e. budgeting, borrowing and investing). Section A of the questionnaire comprised of questions relating to demographic factors of the entrepreneurs. The data from this section enabled the researcher to answer research question four of the study.

Section B had questions relating to the success factors of the enterprise in the form of number of employees and enterprise turnover. These questions were designed to measure the economic success of the enterprises. Section C, D and E consisted of questions relating to the use of the three concepts of financial literacy. Respondents were asked if they made use of these concepts to manage the financial matters of their

SMEs. The data gathered from these questions was used to answer research question one.

Section C, D and E also had questions based on a five point Likert scale. The respondents were asked to answer the questions in a rating scale form of ‘strongly agree’ to ‘strongly disagree’. This was to establish their views and opinions on the applicability of the statements to their enterprises. The responses were used to answer research questions two and three.

However, before the questionnaire was administering to the respondents, a pilot study to test the usefulness of the questionnaire was conducted. This is an important step as it ensured that the questionnaire was designed in manner that was easy to follow and questions were easy to understand. This step also tested if the answers provided would provide the researcher with data needed to answer the research questions.

Pinsonneault, and Kraemer (1993, p. 101) wrote that “a pilot study is a small-scale rehearsal of a systematic survey aimed at testing questions, question flow, and questionnaire format with representatives of the target population”. Kothari (2011, p.101) also described pilot survey as the “replica and rehearsal of the main survey” that can be used to highlight weaknesses and uncovers errors and problems.

Both the covering letter and the questionnaire were pre-tested on five SMEs. The researcher met face to face with the respondents. The participants were asked to comment on the clarity of both the covering letter and the questions on the questionnaire. This process proved to be beneficial to the researcher as respondents provided positive feedback. The respondents were satisfied with covering letter and the overall design of the questionnaire. They however pointed out that there were questions in the questionnaire that were ambiguous and confusing. As an example one respondent highlighted a question that could potentially result in more than one possible answer whilst the researcher only wanted one selection. The changes were made to the questionnaire and thereafter the final questionnaire was distributed to the participants, see Appendix A for the final questionnaire.

The researcher opted for a face to face structured interview process for data collection and this was accomplished in a group format. This method saved time and enabled the researcher to ensure that the participants understood and interpreted the questions the way the researcher wanted them to. Emails comprising of the invitation and covering letter explaining the purpose of the research study were sent to the 100 SMEs. The invitation also indicated that this was a voluntary exercise and those willing to participate in the research study were welcomed to join the researcher for an interview. Three sessions were organised in order to spread evenly the number of participants. A total of 86 participants made it to these sessions. Each respondent was given a questionnaire to complete. The researcher took the group through each question to ensure that all the respondents had the same understanding of the questions. Each session lasted for about 50 minutes due to the questions and discussions arising during the completion of the survey.

The researcher found this method of grouping respondents together in one room to collect data to be both interesting and challenging. The challenges relating to language to communicate, time keeping and availability of stationary such pens were some of the preparatory issues that were not considered by the researcher when opting for this method. The language was a definite issue as some of the questionnaire contained incomplete and inadequate responses. Although the questionnaire contained limited and specific questions relating to financial literacy, respondents ended up asking questions about the research in general.

There were questions relating to whether the research report will be shared with them. Some respondents also wanted to know what was in it for them to participate in the study. Most respondents felt that this was an important study and wanted to know how the findings and recommendations of the study were going to be used to improve their financial literacy and ultimately their business performance going forward. Others after reading the questionnaire decided that it was better for them to complete the questionnaire on their own and would send the completed documents at a later stage. This however proved to be a challenge as the questionnaire were never sent back to the researcher.

4.7 Research data analysis

Upon the completion of the data collection process, the data was entered into an excel spreadsheet using data matrices. The data was then organised, codified and entered into IBM SPSS version 23 statistical software. Once data was exported into SPSS, a number of statistical analyses were conducted in order to provide evidence for the research questions to be answered. The research data was analysed using descriptive and univariate techniques such t tests, one way ANOVA and paired t test.

Burns and Burns (2008) wrote that descriptive statistics is a technique that is used to describe data. Descriptive statistics summarises sets of numeral data and establish patterns, trends, and relationships. This research utilised descriptive statistics in order to answer research question one. Burns and Burns (2008) further argued that information about a particular research sample often provides little intrinsic interest and meaningful deductions can only be tendered beyond the limited data through inferential statistics.

Inferential statistics allowed researchers to draw better inferences as to whether a particular phenomenon can be indiscriminately generalised to a population. This research study made use of univariate techniques which included a paired t test, one way ANOVA and correlation analysis. These analyses were used to answer research questions two, three and four. A paired sample mean, was used to compare two related sample means and establish the impact of pursuing financial literacy concepts on the success of SMEs. Correlation analysis was used to establish the relationship between demographics and the use of financial literacy concepts.

The questionnaire contained questions which required respondents to provide some answers using a rating scale, the reliability or internal consistency of the scale had to be evaluated. The evaluation was conducted on Likert scale items by means of Cronbach's Alpha coefficient. According to Pallant (2010, p. 7) internal consistency is "the degree to which the items that make up the scale are all measuring the same underlying attribute (i.e. the extent to which the items go in hand together)". The Cronbach Alpha coefficient should have values ranging from 0 to 1, greater reliability is said to have been achieved if the Cronbach Alpha is closer to 1 (Pallant, 2010).

Nevertheless, different levels of reliability are required depending on the nature and purpose of the study. Nunnally (1978) as cited by Pallant (2010) recommended a minimum level of 0.7. The Cronbach's Alpha coefficient of the items evaluated using a Likert scale was assessed to be above 0.810 for all the three constructs. All the items on the questionnaire therefore formed part of the data analysis due to this high internal consistency level; see table 4.1 for Cronbach's Alpha coefficients.

Table 4.1: Cronbach's Alpha coefficient analysis for question 10: Budgeting

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.857	.857	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Statement 1	17.41	22.154	.646	.587	.833
Statement 2	17.27	20.622	.760	.618	.812
Statement 3	17.16	23.067	.510	.423	.857
Statement 4	17.25	21.076	.666	.536	.829
Statement 5	17.36	20.702	.736	.628	.816
Statement 6	17.52	22.069	.567	.438	.848

Table 4. 2: Cronbach's Alpha coefficient analysis for question 13: Investing

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.860	.861	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Statement 1	18.16	16.731	.625	.427	.842
Statement 2	18.29	16.157	.699	.567	.828
Statement 3	18.50	16.797	.653	.458	.837
Statement 4	18.24	17.483	.616	.422	.843
Statement 5	18.21	17.738	.609	.501	.844
Statement 6	18.21	16.819	.713	.582	.826

Table 4.3: Cronbach's Alpha coefficient analysis for question 16: Borrowing

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.879	.878	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Statement 1	13.71	15.282	.552	.420	.887
Statement 2	13.86	13.491	.787	.639	.835
Statement 3	14.29	13.721	.661	.552	.865
Statement 4	13.71	12.794	.819	.679	.826
Statement 5	13.95	13.217	.745	.569	.844

4.9 Conclusion

This chapter outlined the research methodology for this study. A research design chosen for this study was quantitative and descriptive in nature as the study aimed to establish the extent to which entrepreneurs made use of financial literacy concepts. The study also sought to find if any relationship exists between the implementation of financial literacy and performance of SMEs. The population comprised of owners or managers of SMEs conducting business within the Emalahleni and Gert Sibande municipality district in Mpumalanga Province. This study used simple random sampling technique because the researcher had a sample frame. Questionnaires were used to collect fresh data from participants. IBM SPSS software was used to analyse the data based on descriptive and univariate techniques such as t tests, one way ANOVA and paired t test.

Chapter 5: Results

5.1 Introduction

This chapter describes the results of this study following the data analysis process. The data was collected from participants through questionnaires in a research survey format. The respondents were asked to indicate their views on how they pursued financial literacy concepts in managing the finances of their SMEs. The statistical tools used for data analysis included descriptive statistics and statistical univariate techniques. The results are organised according to each research question and pie charts, bar graphs and tables are used to summarise the results for this study.

5.2 Description of the sample

A total of 100 SMEs were selected to participate in this research study, 86 entrepreneurs honoured the invitation to participate in the study. A number of questionnaires were omitted from the study for various reasons. There were respondents who opted to complete the questionnaires during their own time but never returned the completed questionnaires to the researcher. Other questionnaires were excluded because the SMEs did not meet the criterion of this study. The respondents indicated either annual turnover or number of employees higher than the amounts stipulated in the study's definition of the SMEs. Only 53 questionnaires were deemed to have met the criteria of the study, thus achieving a response rate of 53%.

5.3 Results presentation

5.3.1 Results for research question 1:

To what extent do entrepreneurs in the SMEs sector pursue financial literacy concepts in the managing their business finances?

This research question was answered by descriptive data and one sample t-test statistical analysis. The results will be discussed under each concept of financial literacy.

5.3.1.1 Budgeting

Figure 5.1 depicts responses obtained when the respondents were asked whether they undertook budgeting activities as part of managing their enterprises. A total of 44 (83%) respondents indicated that they used budgets in their enterprises whereas 9 (17%) indicated that they did not conduct budgeting activities in their SMEs.

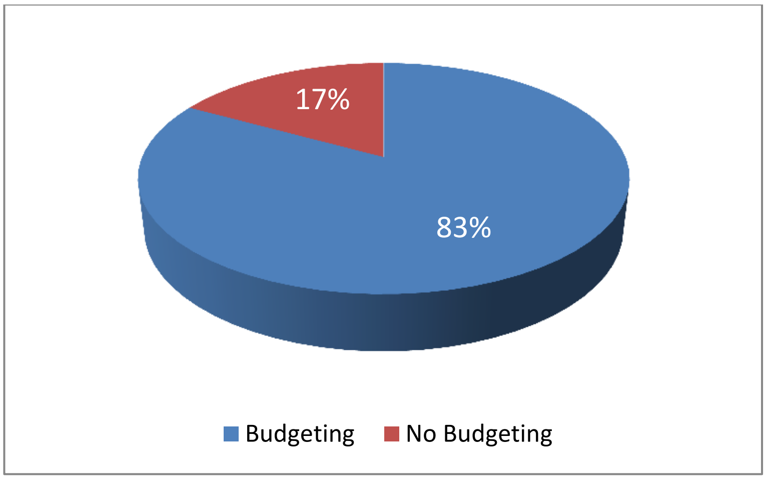

Figure 5. 1: Percentage of respondents undertaking budgeting activities in their SMEs

Those who indicated that they practiced the budgeting activities in their SMEs, were further asked about the time horizon they considered for budgeting purposes. As seen on figure 5.2, majority of the respondents (60%) indicated that their budgets were based on a 12 months cycle and 30% indicated that their budget cycle was less than a year. Other respondents (10%) mentioned that they preferred periods of more than three years.

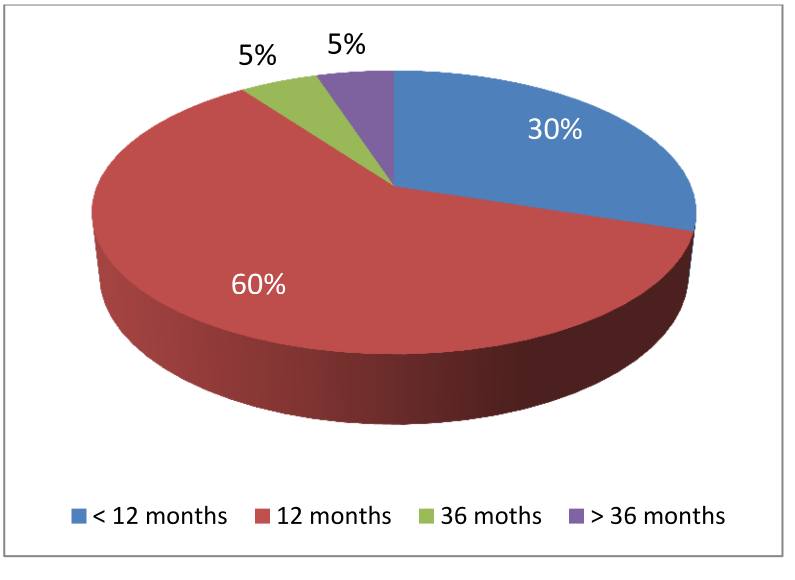

Figure 5. 2: Preferred budgeting time horizon by SMEs

Table 5.1 shows the descriptive statistics for the responses provided by the respondents when they were asked to rate each statement from 1 being strongly disagree to 5 being strongly agree and 3 as neutral or midpoint of the scale. It can be noticed that the respondents rated all the statements to be applicable to their enterprises as all the scores were higher than a mean value of 3.

Table 5. 1: Descriptive statistics for budgeting activities

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev
S1. Enterprise develops business objectives to be achieved in a year	44	1	5	3.39	1.125
S2. Enterprise consistently prepares operational budgets on a predetermined basis, e.g. bi- annual, annual, etc.	44	1	5	3.52	1.191
S3. The business prepares the budget beginning of the financial year and review at year end	44	1	5	3.64	1.183
S4. Budgets form a basis for employee performance contracts	44	1	5	3.55	1.247
S5. There is strong alignment of the budget to the company strategy	44	1	5	3.43	1.208
S6. Enterprise makes use of budgeting process such as activity based budgeting, beyond budgeting, rolling budget instead of traditional budgeting	44	1	5	3.27	1.246

However to establish if the entrepreneurs practiced significantly the activities denoted by each statement in their businesses, a one-sample test was carried out against a midpoint of scale (3). Table 5.2 reveals the results of the analysis. Since the p values (significance) for all statement except statement 6 are less than 5%, it can be concluded that entrepreneurs considered these practices as significant. It can also be concluded that entrepreneurs did not see the significance in pursuing alternate budgeting methods (i.e. statement 6), since the p value is greater than 5%.

Table 5. 2: One Sample Test for respondents budgeting activities

One-Sample Test				
	Test Value = 3			
	t	df	Sig. (2-tailed)	Mean Difference
S1. Enterprise develops business objectives to be achieved in a year	2.278	43	.028	.386
S2. Enterprise consistently prepares operational budgets on a predetermined basis, e.g. bi-annual, annual, etc.	2.912	43	.006	.523
S3. The business prepares the budget beginning of the financial year and review at year end	3.568	43	.001	.636
S4. Budgets form a basis for employee performance contracts	2.901	43	.006	.545
S5. There is strong alignment of the budget to the company strategy	2.370	43	.022	.432
S6. Enterprise makes use of budgeting process such as activity based budgeting, beyond budgeting, rolling budget instead of traditional budgeting	1.452	43	.154	.273

5.3.1.2 Borrowing

Figure 5.3 shows the responses gathered from the respondents when asked if they were involved in borrowing activities in their SMEs. A total of 42 (79%) indicated that they raised capital through borrowing activities. 11 (21%) respondents indicated that they did not engage in borrowing processes.

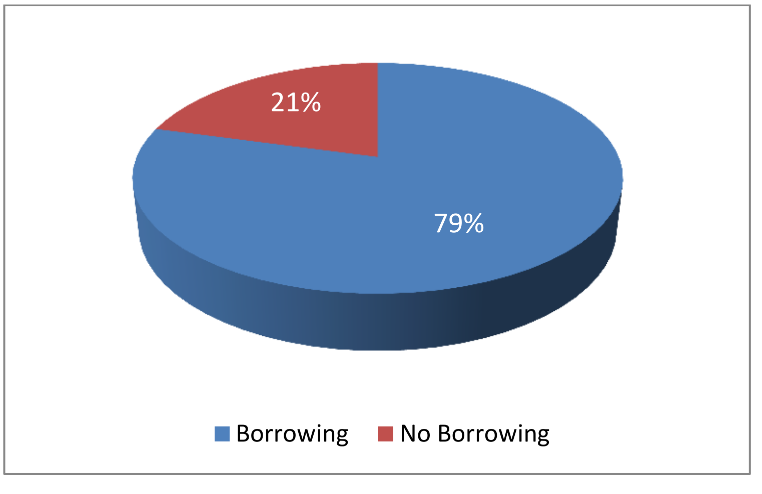

Figure 5. 3: Percentage of respondents conducting borrowing activities

The respondents also indicated that they considered various institutions for sourcing capital. As shown in Figure 5.4, majority of the respondents (79%) indicated that commercial banks were their main source of funds. 13% of respondents indicated that they borrowed funds from friends and family whilst venture capitalists and government institutions were the least preferred sources of capital, relied on by only 4% of the respondents.

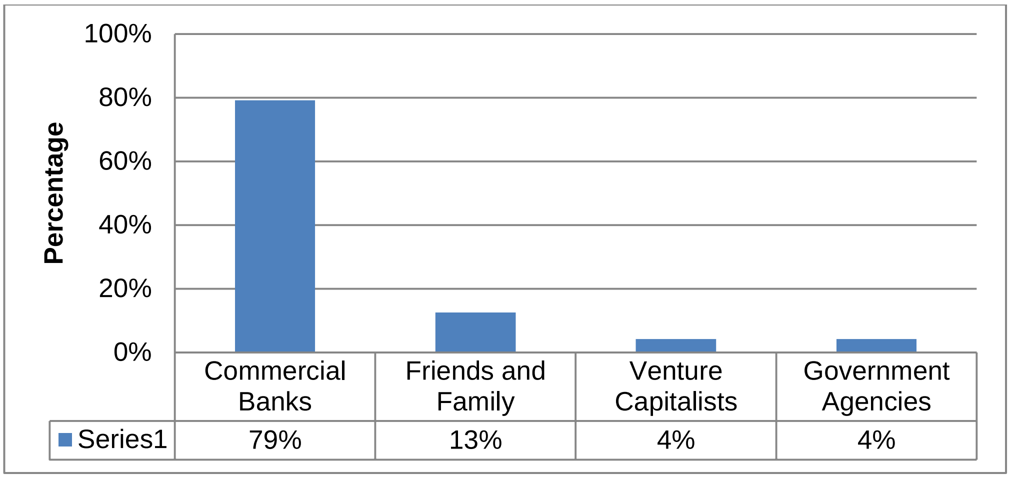

Figure 5. 4: Institutions utilised by respondents for raising capital

Table 5.3 presents the descriptive statistics for each statements rated by the respondents when asked about borrowing activities in their SMEs. Rating was done by allocating 1 for a strongly disagree response and 5 for a strongly agree with 3 being neutral. It is clear that the respondents rated all the statements to be applicable to their enterprises. The score for each statement was higher than the midpoint of 3.

Table 5. 3: Descriptive statistics for borrowing activities

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev
S1. Company consider cost of borrowing i.e. interest rate before taking on a loan	42	2	5	3.67	1.028
S2. Financial ratios such Debt to Equity are considered before taking out a loan	42	1	5	3.52	1.065
S3. Enterprise splits long term and short debt in order to manage the its balance sheet	42	1	5	3.10	1.165
S4. Tax benefit is taken into consideration when deciding on optimal capital structure of the firm	42	1	5	3.67	1.141
S5. Enterprise is fully conversant with the process to acquire funding from different financial institutions	42	1	5	3.43	1.151

Table 5. 4: One Sample Test for respondents budgeting activities

One-Sample Test

	Test Value = 3			
	t	df	Sig. (2-tailed)	Mean Difference
S1. Company consider cost of borrowing i.e. interest rate before taking on a loan	4.203	41	.000	.667
S2. Financial ratios such Debt to Equity are considered before taking out a loan	3.188	41	.003	.524
S3. Enterprise splits long term and short debt in order to manage the its balance sheet	.530	41	.599	.095
S4. Tax benefit is taken into consideration when deciding on optimal capital structure of the firm	3.788	41	.000	.667
S5. Enterprise is fully conversant with the process to acquire funding from different financial institutions	2.414	41	.020	.429

A one-sample test was also carried out against the midpoint of scale of 3 to establish the significance of each practice in the business as far as borrowing is concerned. Table 5.3 reveals the results of the analysis. Since the p values (significance) for all statement except statement 3 are less than 5%, it can be concluded that entrepreneurs regarded these practices as significantly important in their SMEs. It can also be deduced that entrepreneurs did not see the significance in splitting the short term and long debt (i.e. statement 3), since the p value is greater than 5%.

5.3.1.3 Investing

The respondents were further asked about investing activities in their enterprises, see figure 5.5 for distribution of responses. The majority of the respondents 38 (72%) indicated that investment activities were part of managing their SMEs. Only 15 (28%) respondents mentioned that they did not conduct investment activities.

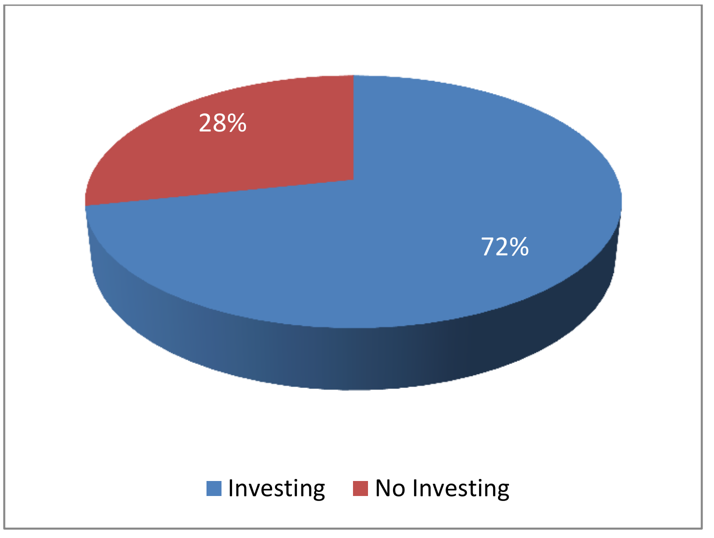

Figure 5. 5: Distribution of respondents making use of investing

As indicated in figure 5.6, those who conduct investment activities, majority (52%) mentioned that their retained income was invested in commercial banks. 42% of the respondents indicated that they invested their surplus cash on other business interests. Only 4% mentioned that they made use of Johannesburg Stock Exchange (JSE) and no respondent indicated that they invested their money on any government bonds.

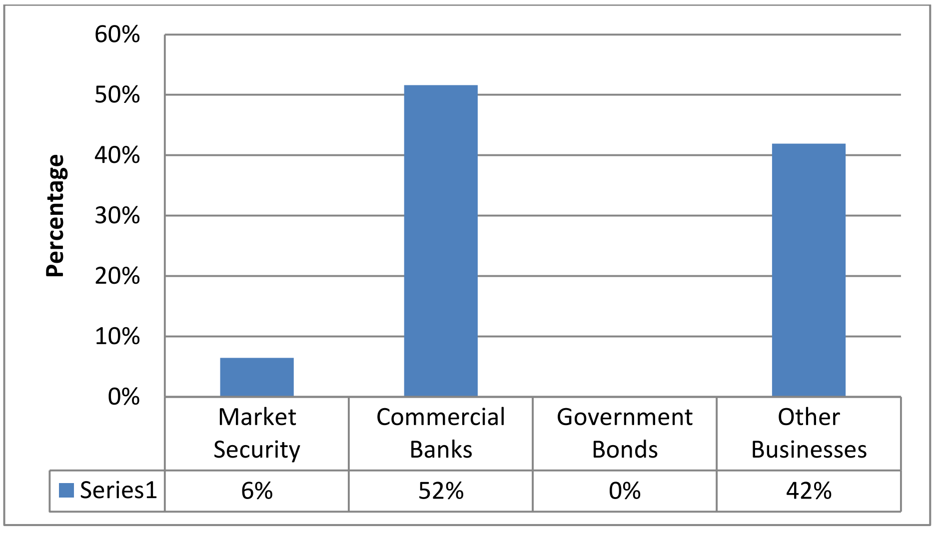

Figure 5. 6: Preferred investment instruments by respondents

Table 5.5 presents the descriptive statistics each statements rated by the respondents when they were asked about investing activities in their SMEs. Rating was done by allocating 1 for a strongly disagree response and 5 for a strongly agree with 3 being a midpoint of the scale. The respondents rated all the statements to be applicable to their enterprises. The score for each statement was above a neutral point of 3.

Table 5. 5: Descriptive statistics for investing activities

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev
S1. Enterprise invests its surplus cash to in order generate more income in the future	38	1	5	3.76	1.125
S2. Consideration of financial measures such as NPV, IRR and ROA is important before committing to an investment	38	1	5	3.63	1.125
S3. Enterprise makes use of third party to conduct investment for the business	38	1	5	3.42	1.081
S4. Investing in e-commerce infrastructure such as internet website is critical to the business success	38	1	5	3.68	1.016
S5. Company invests in Research and Development initiatives.	38	2	5	3.71	.984
S6. Company invests in human capital development, e.g. training of staff	38	2	5	3.71	1.011

A one-sample test also confirmed that entrepreneurs considered each practice as significantly important in their enterprise. The p values for all statement are less than 5%.

Table 5. 6: One Sample Test for investing activities

One-Sample Test				
	Test Value = 3			
	t	df	Sig. (2-tailed)	Mean Difference
S1. Enterprise invests its surplus cash to in order generate more income in the future	4.180	37	.000	.763
S2. Consideration of financial measures such as NPV, IRR and ROA is important before committing to an investment	3.460	37	.001	.632
S3. Enterprise makes use of third party to conduct investment for the business	2.400	37	.022	.421
S4. Investing in e-commerce infrastructure such as internet website is critical to the business success	4.150	37	.000	.684
S5. Company invests in Research and Development initiatives.	4.452	37	.000	.711
S6. Company invests in human capital development, e.g. training of staff	4.332	37	.000	.711

5.3.2 Results for research question 2:

What is the impact of pursuing financial literacy concepts on economic business success of SMEs?

This study used turnover and number of employees as indicators of SME economic success. This question was answered by using descriptive data, paired sample test, independent sample test and Spearman's rho correlation analysis.

5.3.2.1 Annual turnover

During the data collection process, respondents were not asked to specify the exact annual turnover amount achieved by their enterprises. The researcher believed that owners would be reluctant to divulge this kind of information. Therefore, the respondents were only requested to indicate their annual turnover based on turnover bracket scale, figure 5.7.

Respondents were asked to indicate turnover during the inception year and the most recent year. Majority of the SMEs (55%) had a turnover of less than R0.5 million when they started operating and none of them were achieving turnover of greater than R20 million. During the current year however, they were only 13% of the SMEs earning revenues of less R0.5 million. SMEs achieving between R10 and R50 million increased from zero to 21%. The comparison between the two periods does reveal an overall increase in revenue earned by the SMEs over the years in business.

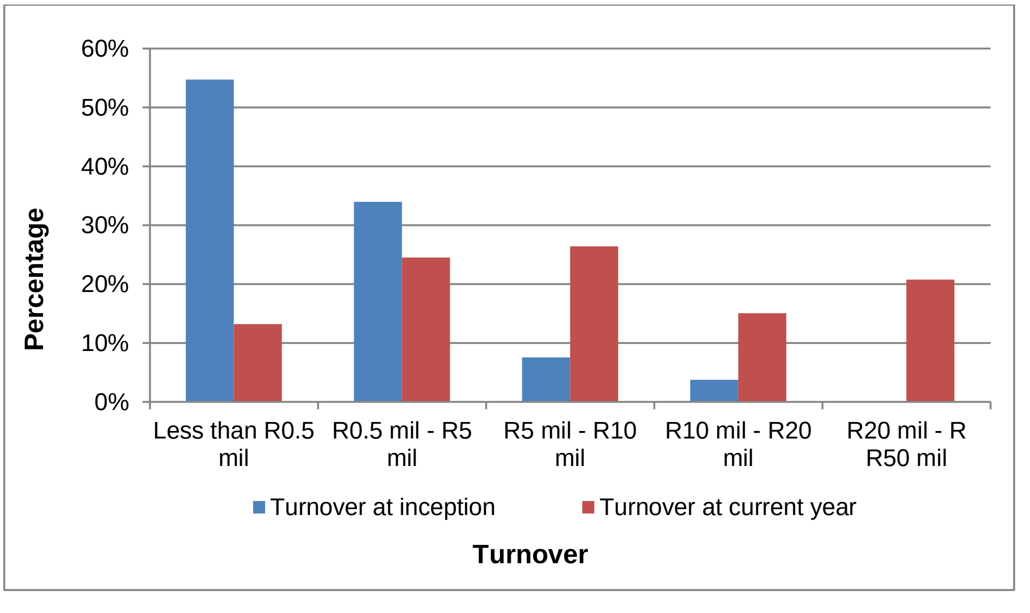

Figure 5. 7: Turnover distribution of the SMEs

5.3.2.2 Number of employees

The respondents were requested to indicate exact number of employees at inception and during the current year. 45% of the SMEs only had less than five employees during the initial year of their business operations and only 2% had more than 30 employees. There is an overall increase in the number of employees between inception period and the current year. The average number of employees during the establishment period was eight, this increased to 25 during the current year. During the recent year, only 9% of the SMEs reported to have employees of less than five. The SMEs with more than 30 employees increased to 26% during the current year.

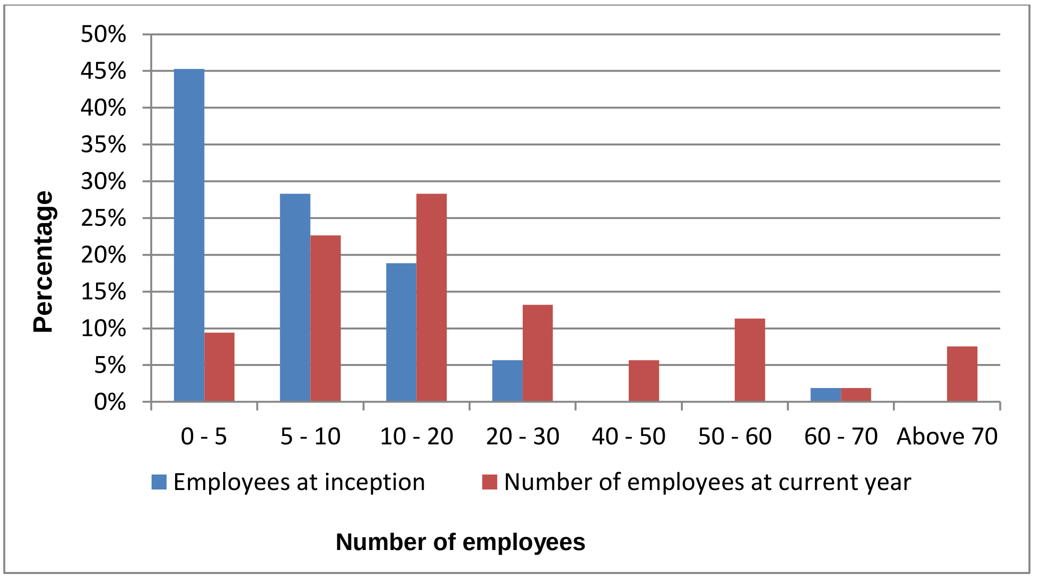

Figure 5. 8: SMEs number of employees

Table 5. 7: Descriptive statistics for number of employees

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Number of employees at start up	53	0.000	60.000	8.792	9.600
Number of employees during current year	53	3.000	160.000	25.680	26.640

In order to answer research question 2, the SMEs were categorised into two groups, successful and less successful. As mentioned previously, the annual turnover and number of employees were used as indicators of SME economic success. An increase in both indicators meant that the SME was successful whereas a decrease in either indicator resulted in SMEs being classified as less successful. Therefore, SMEs with an increase in both the turnover and number of employees were classified as successful. The SMEs which recorded no improvement in either the turnover or the number of employees were considered to be less successful.

As explained in the previous section, the entrepreneurs were not requested to reveal their exact turnover amount. However, 40 entrepreneurs reported to have an increase in SMEs turnover thereby moving from a lower turnover bracket to a higher bracket, 13 entrepreneurs indicated that there was no improvement on the SMEs annual turnover.

40 entrepreneurs also revealed that the number of employees increased compared to when they were established and however, 13 entrepreneurs recorded that there was no improvement on the number of employees. As per the definition of economic success, SMEs had to achieve an increase in both the turnover and the number of employees. Combing the results based on the two indicators, resulted in 38 (72%) SMEs being classified as success and 15 (28%) SMEs classified as less successful.

The data regarding the number of employees was however subjected to statistical analysis to confirm that the increases reported by successful SMEs and the reduction as revealed by less successful SMEs were significant. Tables 5.8 shows the descriptive statistics for the SMEs classified as less successful SMEs. The average number of employees during the start-up period was 12, this decrease to 11 during the most recent year.

Table 5. 8: Descriptive statistics for employees for less successful SMEs

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Number of employees at inception	15	3.00	60.00	12.800	14.360
Number of employees during current year	15	3.00	55.00	11.530	12.740

A paired sample t-test was conducted to establish if the decrease in the number of employees reported by these SMEs was significant. As seen on table 5.9, the p value was calculated to be 0.277 which is greater than 5% significance. This indicates that the decrease in number of employees was not significant. This evidence supports the analysis in the previous section that these SMEs were less successful as they did not show an improvement or an increase in either success indicator.

Table 5. 9: Paired sample t-test for number for employees in less successful SMEs

Paired Samples Test						
		Paired Differences		T	df	Sig. (2-tailed)
		Mean	Std. Deviation			
Pair 1	Current Number of employees - Number of employees at start up	1.2667	4.333	1.132	14	0,277

Table 5.10 shows the descriptive statistics for the SMEs deemed successful. The average number of employees for these SMEs increased from an average of seven during inception to 31 in the current year.

Table 5. 10: Descriptive statistics for number for employees successful SMEs

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Number of employees at inception	38	0	25	7.210	6.510
Number of employees during current year	38	4	160	31.260	28.690

A paired sample t-test was also conducted to establish if the increase in number of employees for this group of SMEs was significant. As seen in table 5.11, the p value was calculated to be 0.000 which is less than 5% significance. This indicates that there was a significant increase in the number of employees. Therefore it was correct to classify these SMEs as successful.

Table 5. 11: Paired Sample Test for successful SMEs

Paired Samples Test						
		Paired Differences				
		Mean	Std. Deviation	t	df	P value
Pair 1	Current Number of employees - Number of employees at start up	24.0537	28.643	5,176	37	0.000

The independent t-test was thereafter conducted to establish whether there was a significant difference in the manner in which the successful SMEs and the less successful group made use of financial literacy concepts. This was to establish if the use of financial literacy impacts on the success of these enterprises. The analysis was based on the response gathered from the respondents when they were asked to rate the statements in the questionnaire as far as pursuing the three financial literacy concepts is concerned. Refer to table 5.1, 5.3, 5.5 and 5.12 for descriptive statistics. Table 5.13 and 5.14 presents the results of the independent t-test.

Table 5. 12: Descriptive statistics for utilisation of financial literacy concepts.

Group Statistics

	Success grouping	N	Mean	Std. Deviation	Std. Error Mean
Budgeting	Successful	30	3.994	.536	.098
	Unsuccessful	14	2.333	.333	.089
Investing	Successful	29	3.965	.650	.120
	Unsuccessful	12	2.819	.970	.280
Borrowing	Successful	30	3.800	.739	.134
	Unsuccessful	12	2.666	.810	.233

The independent t-test results are shown in table 5.13. The p values are less than 5% significance, therefore it can be concluded that there is a significant difference in the manner in which the two groups made use of the three financial literacy concepts.

Table 5. 13: Independent sample test between successful and less successful SMEs

Independent Samples Test

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
Budgeting	Equal variances assumed	10.622	42	.000	1.661
Investing	Equal variances assumed	4.424	39	.000	1.146
Borrowing	Equal variances assumed	4.369	40	.000	1.133

A Spearman's rho correlated analysis was conducted to establish if a relationship exists between the use of financial literacy concepts and the economic success of SMEs. This correlation analysis was conducted based on number of employees only. It was previously demonstrated that successful groups managed to increase both their turnover and number of employees. Hence the use of this economic measure was sufficient for this analysis.

Table 5.14 shows the results of the study. At 5% significance level there is significant and strong evidence to conclude that there is a relationship between the use of financial literacy concepts and the increase in number of employees; the p values are all less than 0.05 and the high correlation coefficient indicate a strong relationship between the three financial literacy concepts and the increase in number of employees.

Table 5. 14: Correlation analysis between increase in number of employees and use of financial literacy concepts

Correlations			
			Increase in employees
Spearman's rho	Budgeting	Correlation Coefficient	.665**
		Sig. (2-tailed)	,000
		N	44
	Investing	Correlation Coefficient	.339*
		Sig. (2-tailed)	,030
		N	41
	Borrowing	Correlation Coefficient	.503**
		Sig. (2-tailed)	,001
		N	42

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

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

5.3.3 Results for research question 3:

What is the relationship between each concepts of financial literacy and economic business success of the SMEs?

A Spearman's rho correlation analysis conducted above established that a relationship between the use of financial literacy concepts and the economic success of SMEs exists. A linear regression analysis was conducted in order to establish the type and direction of the relationship of each financial literacy concepts and the success of the SMEs. The analysis was conducted based on the responses provided by the respondents when asked to rate the different statements in the questionnaire.

Table 5. 15: Descriptive statistics for the regression analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.503[a]	.253	.207	23.919

a. Predictors: (Constant), Borrowing, Budgeting, Investing

Table 5. 16: One way ANOVA analysis for the regression analysis

ANOVA [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9478.927	3	3159.642	5.523	.002[b]
	Residual	28034.394	49	572.130		
	Total	37513.321	52			

a. Dependent Variable: Increase in employees

b. Predictors: (Constant), Borrowing, Budgeting, Investing

Table 5.17 depicts the results of the regression analysis. The coefficients of the three financial literacy concepts all are positive, indicating a positive relationship. Therefore, the equation for economic success would be as follows:

Economic Success =10.338(borrowing) + 8.165(budgeting) + 1.322(investing) - 52.149

However, based on the 5% significance, it can be concluded that none of the three concepts could be used to predict the economic success of the SMEs since the p values are all great than 0.05.

Table 5. 17: Regression analysis between increase in number of employees and use of financial literacy concepts

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-52.149	18.038		-2.891	.006
	Budgeting	8.165	4.531	.253	1.802	.078
	Investing	1.322	5.347	.039	.247	.806
	Borrowing	10.338	5.250	.312	1.969	.055

a. Dependent Variable: Increase in employees

5.3.4 Results for research question 4:

What is the influence of demographic factors (i.e. education, gender and age) of entrepreneurs on the use of financial literacy concepts?

5.3.4.1 Respondents gender

The sample was made up of (39)74% males and (14) 26% female.

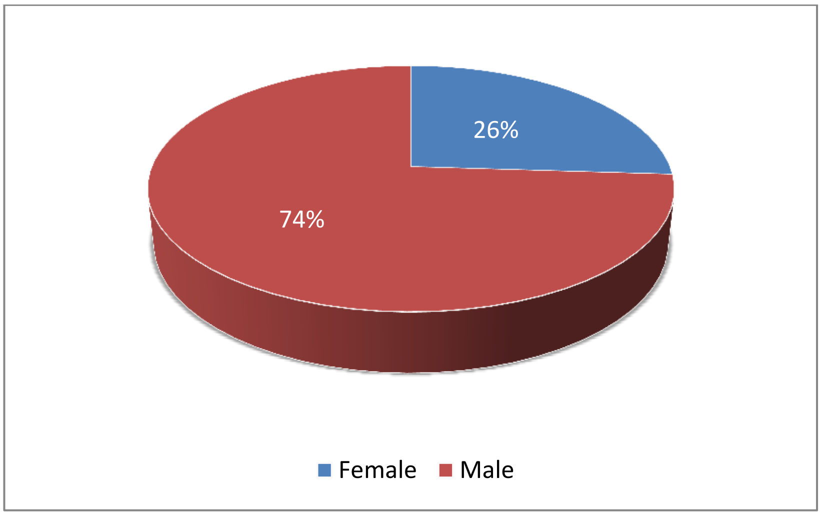

Figure 5. 9: Gender of respondents

5.3.4.2 Age of respondents

Figure 5.10 shows the age distribution of the respondents. Only 13% indicated that they were less than 30 years old. 28% of the respondents were between the ages 30 and 40 years old, 40 and 50 was represented by 30% of the respondents and 28% revealed that there were above 50 years old.

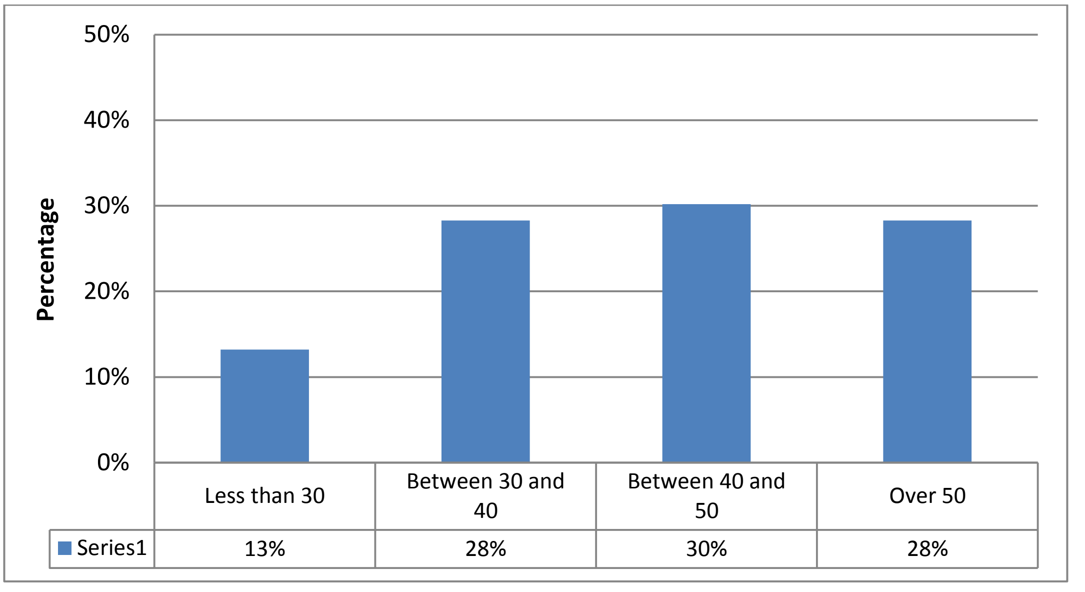

Figure 5. 10: Age of respondents

5.3.4.3 Level of education

The respondents indicated they had various levels of education. The majority of entrepreneurs represented by 34% indicated that matric was their highest qualification. Only 9% of respondents had a postgraduate degree, 17% had a degree, 26% had a diploma and those with education level less than matric were only 13% of the respondents.

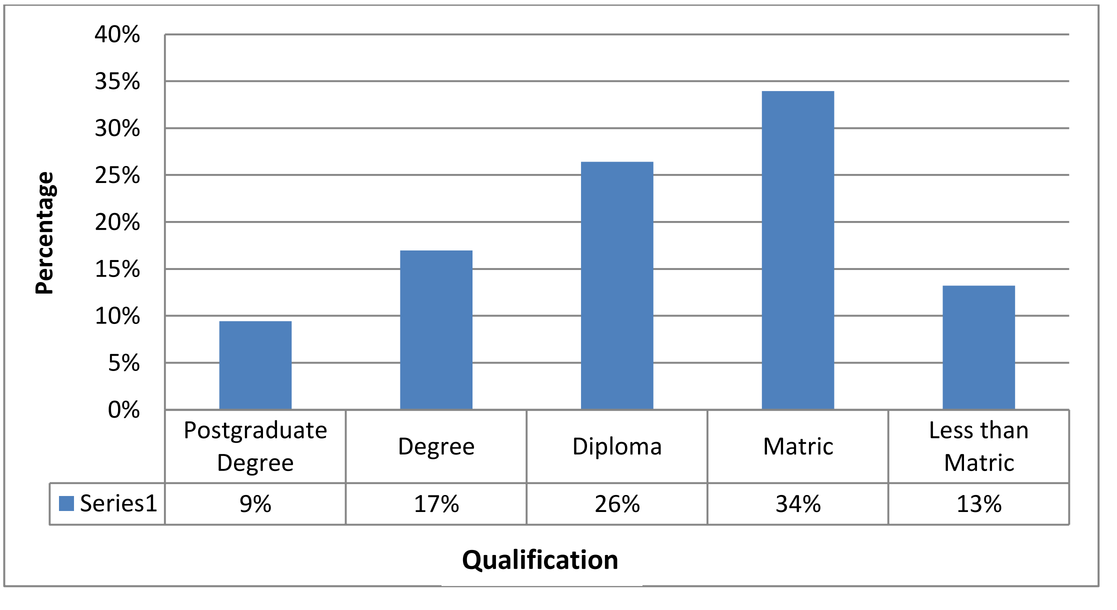

Figure 5. 11: Educational level of respondents

5.3.4.4 Statistical analysis for demographics

The one way ANOVA was conducted in order to determine the evidence that could be used to answer research question 4. The one way ANOVA test was utilised to establish if there is significant difference in the use of financial literacy concepts by the respondents taking their demographics into consideration.

a) Gender

It can be seen in table 5.18 that the mean score obtained by male respondents is slightly higher than that achieved by female respondents.

However to test if the difference in mean scores was significant, a one way ANOVA was conducted to compare the two groups' results. At significance level of 5%, it can be concluded that the difference in mean scores for the two groups is not significantly influenced by their gender. The p value as shown in table 5.19 are higher than 0.05.

Table 5. 18: Desctriptive statistics for respondents based on gender

Descriptive Statistics				
		N	**Mean**	**Std. Deviation**
Borrowing	Female	9	3.222	1.079
	Male	33	3.545	.866
	Total	42	3.476	.912
Investing	Female	9	3.278	.909
	Male	32	3.729	.904
	Total	41	3.630	.913
Budgeting	Female	14	3.405	.989
	Male	30	3.494	.898
	Total	44	3.466	.917

Table 5. 19: One way ANOVA analysis for respondents based on gender

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Borrowing	Between Groups	.739	1	.739	.886	.352
	Within Groups	33.337	40	.833		
	Total	34.076	41			
Investing	Between Groups	1.431	1	1.431	1.748	.194
	Within Groups	31.931	39	.819		
	Total	33.362	40			
Budgeting	Between Groups	.077	1	.077	.089	.766
	Within Groups	36.067	42	.859		
	Total	36.143	43			

b) Education levels

A one way ANOVA was conducted taking into account the various education levels. Table 5.21 presents the results of the analysis. Investing is the only concept of financial literacy that is influenced significantly by education. The p value associated with education is 0.031 which is less than 0.05. The p values for borrowing and budgeting is much higher than 5% significance level, meaning these concepts are not influenced by the entrepreneur's level of education.

Table 5. 20: Desctriptive statistics for respondents based on qualifications

Descriptive Statistics

		N	Mean	Std. Deviation
Borrowing	Post graduate Degree	5	3.440	.607
	Degree	8	3.300	1.274
	Diploma	10	3.960	.842
	Matric	13	3.323	.847
	Less than Matric	6	3.267	.787
	Total	42	3.476	.912
Investing	Post graduate Degree	3	3.889	.255
	Degree	7	2.714	1.109
	Diploma	12	4.056	.770
	Matric	15	3.689	.799
	Less than Matric	4	3.542	.832
	Total	41	3.630	.913
Budgeting	Post graduate Degree	4	3.458	1.189
	Degree	7	3.262	.995
	Diploma	12	3.514	.928
	Matric	17	3.451	.897
	Less than Matric	4	3.750	.995
	Total	44	3.466	.917

Table 5. 21: One way ANOVA analysis for respondents based on educational levels

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Borrowing	Between Groups	3.164	4	.791	.947	.448
	Within Groups	30.912	37	.835		
	Total	34.076	41			
Investing	Between Groups	8.327	4	2.082	2.994	.031
	Within Groups	25.035	36	.695		
	Total	33.362	40			
Budgeting	Between Groups	.646	4	.161	.177	.949
	Within Groups	35.498	39	.910		
	Total	36.143	43			

Multiple comparisons by utilising Turkey HSD tool was also conducted to identify the exact education level that impacts on SMEs investing activities. The results in table 5.22 revealed that those with diplomas influenced the SMEs investment activities since the p value is less than 0.05.

Table 5. 22: Multiple comparisons of factors based on educational levels

Multiple Comparisons					
Tukey HSD					
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.
Investing	Post graduate Degree	Degree	1,175	,575	,268
		Diploma	-,167	,538	,998
		Matric	,200	,527	,995
		Less than Matric	,347	,637	,982
	Degree	Post graduate Degree	-1,175	,575	,268
		Diploma	-1.34127*	,397	,014
		Matric	-,975	,382	,101
		Less than Matric	-,827	,523	,518
	Diploma	Post graduate Degree	,167	,538	,998
		Degree	1.34127*	,397	,014
		Matric	,367	,323	,787
		Less than Matric	,514	,481	,822
	Matric	Post graduate Degree	-,200	,527	,995
		Degree	,975	,382	,101
		Diploma	-,367	,323	,787
		Less than Matric	,147	,469	,998
	Less than Matric	Post graduate Degree	-,347	,637	,982
		Degree	,827	,523	,518
		Diploma	-,514	,481	,822
		Matric	-,147	,469	,998

*. The mean difference is significant at the 0.05 level.

c) Age

A one way ANOVA was also conducted to establish the significance of age of entrepreneurs on the use of financial literacy. The results in table 5.24 indicate that age cannot explain the difference in the use of financial literacy concept by entrepreneurs, the p values are higher than 0.05.

Table 5. 23: Desctriptive statistics for respondents based on age groups

Descriptive Statistics				
		N	**Mean**	**Std. Deviation**
Borrowing	Less than 30	3	4.067	.115
	Between 30 and 40	11	3.273	.981
	Between 40 and 50	16	3.612	.884
	Older than 50	12	3.333	.985
	Total	42	3.476	.912
Investing	Less than 30	4	4.042	.083
	Between 30 and 40	13	3.590	1.103
	Between 40 and 50	13	3.551	.904
	Older than 50	11	3.621	.904
	Total	41	3.630	.913
Budgeting	Less than 30	5	4.067	.365
	Between 30 and 40	13	3.128	.975
	Between 40 and 50	14	3.583	.982
	Older than 50	12	3.444	.863
	Total	44	3.466	.917

Table 5. 24: One way ANOVA analysis for respondents based on age groups

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Borrowing	Between Groups	2.044	3	.681	.808	.497
	Within Groups	32.033	38	.843		
	Total	34.076	41			
Investing	Between Groups	.780	3	.260	.295	.828
	Within Groups	32.581	37	.881		
	Total	33.362	40			
Budgeting	Between Groups	3.486	3	1.162	1.423	.250
	Within Groups	32.658	40	.816		
	Total	36.143	43			

5.4 Conclusion

This chapter presented the results following data analysis process. The statistical tools used to analyse the data included descriptive statistics, independent t-test, one way ANOVA and inferential statistical analysis. The next chapter will discuss the results for each research question.

Chapter 6: Discussion of Results

6.1 Introduction

The chapter aims to discuss the results of this study taking into consideration the research objectives. The main objectives of this study were to understand the extent to which entrepreneurs in the SME sector pursue the financial literacy concepts, namely, budgeting, investing and borrowing in managing their business finances and to establish the relationship between the use of financial literacy concepts and economic success of the SMEs. The results will be critically reviewed in respect to the literature reviewed in the previous chapters.

6.2. Research question 1: what is the extent to which the entrepreneurs in the SME sector pursue financial literacy concepts in managing their business finances?

6.2.1 Findings of research question 1:

6.2.1.1 Borrowing

The results in figure 5.3 show that majority (79%) of the entrepreneurs raised capital through borrowing activities and only 21% did not engage in this process. The literature highlighted that access to finance was one of the major challenges faced by SMEs (Beck et al., 2011; Dwyer & Kotey, 2015). The research studies that investigated the various means through which SMEs raised their capital (Hzy, 2011; Deesomsak et al., 2009), established that the main source of capital was through debt, equity or combination of both. Debt was primarily provided by the banks and equity was either sourced from the owners of the enterprise or from venture capitalists.

The results in figure 5.4 indicate that majority of the entrepreneurs (79%) use commercial banks as the main source of capital for their SMEs. This validates the findings of the previous research studies on the subject of capital sourcing by SMEs. This results support Wu et al. (2008) who stated that SMEs tend to use commercial lenders, especially institutional lenders as the source of capital.

Table 5.4 presents interesting evidence regarding borrowing activities by SMEs. It was established that entrepreneurs did take into consideration financial ratios such as debt to equity ratios when they planned on sourcing debt. This is important for SME to consider as there is an optimal debt to equity ratio that they should aim for in order to maximise their tax benefit. This study also ascertained that the entrepreneurs considered the interest rate levied on their loans amounts. Furthermore, entrepreneurs are also aware of fact that there are tax benefits when opting for debt. This is what Modigliani and Miller (1963) as cited by Fatoki (2012) recommended to the SMEs. The SMEs should choose debt rather than equity as debt offers tax benefits since interest paid is tax deductible and dividends are not.

The study determined that entrepreneurs who sourced capital through debt did not differentiate between long and short term debt. Deesomsak et al. (2009) urged business to consider the maturity of debt as it has an impact on interest paid over time. SMEs should aim to use the long term debt on long terms projects such as purchase of equipment and business expansion projects whereas short term loans should be for short term needs like inventory orders and other daily needs.

The study also confirmed that a small number of entrepreneurs obtained capital funds from other sources. As depicted in figure 5.4, 13% of entrepreneurs preferred to source funds from their friends and family. This is consistent with several studies (Mateev et al., 2013; Smit & Watkins, 2012; Wu et al. 2008) that highlighted that SMEs preferred to use their own personal savings or loans from friends and relatives, but this was dependent on the life cycle of the business. La Rocca et al. (2011) posited that SMEs tend to gradually adjust their capital structure as they progress through life the cycle. SMEs during the development stage tend to raise capital internally. This study did not focus on the various stages of business through the life cycle. The mixture of various sources of capital indicate the different stages that these SMEs are at this point in time. Their capital sourcing mechanisms however still provide interesting insights.

Figure 5.4 further shows that a small percentage (4%) of entrepreneurs indicated that they made use of venture capitalists and government agencies as their source of capital. Fatoki (2014a) and Blumberg and Letterie (2008) wrote that most entrepreneurs did not know much about angles and venture capitalists. This resulted in SMEs making use of only bank loans to finance their capital needs. This is an area where venture capitalists and government agencies ought to get involved in and raise more awareness about their roles in SME development.

6.2.1.2 Budgeting

Pietrzak (2014) argued that operational budgeting was the most frequently used method of management accounting by enterprises. Kalekye and Memba (2013) posited that budgeting was the most important factor in managing business finances. Pietrzak (2014) found that over 90% of the business practiced budgeting as a management tool. Furthermore, Ahmad and Mohamed (2012) established that majority of the SMEs in Malaysia also indicated a high utilisation of financial budgeting. This study concurs with the previous finding, it proved that majority of the entrepreneurs in the SME sector used budgets as management tools in their enterprises. As shown in figure 5.1, 83% compared to 17% of the entrepreneurs revealed that they undertook budgeting process in their enterprises.

This study also established that most SMEs (63%) as seen on figure 5.2, undertook their budgets based on a 12 months cycle. This finding supports Ahmad and Mohamed (2012) and Rickards (2008) who discovered that a large number of SMEs conducted their budgets based on a similar time frame. Furthermore, this study ascertained that SMEs also prepared their budgets at the beginning of each financial year and held review sessions at least once a year. This corroborates the findings of Rickards (2008) who highlighted that SMEs reviewed their strategic objectives at least once a year. This is of vital importance for end of the year financial reporting as key institutions such as the South African Revenue Services (SARS) also based their tax year on a 12 months period. Only 31% of entrepreneurs however indicated that their budgets were based on less than a year. It was also noted that a small percentage of SMEs (6%) undertook their budget cycles beyond 36 months.

Table 5.2 reveals interesting findings concerning SMEs budgeting activities. This study revealed that budgets were aligned with the objectives and the overall strategy of the enterprises. This finding is supported by Warue et al. (2013) who wrote that budgets were a reflection of what management expected regarding firm's performance. Budgets are a reflection of how the enterprise is doing relative to its objectives and overall strategy.

It was also motivating to note that entrepreneurs used budgets as part of performance management for their employees. Pietrzak (2014) also argued in favour of budgets being used as part of organisation's evaluation, motivation and performance management. This finding however invalidates the finding by Cohen & Karatzimas

(2011) who argued that there was a limited use of budgets as part of performance evaluation as the human resource departments had limited involvement during budgeting processes.

Østergren and Stensaker (2011) and Zeller and Metzger (2013) highlighted that most organisations were making use of budgeting processes such as beyond budgeting, better budgeting, rolling forecasts, and activity-based budgeting, as a replacement of the traditional budgeting in order to navigate through the complex business environment. This study invalidated this finding that the entrepreneurs in the SMEs sector did not did make use of other budgeting methods. However, Diamond and Khemani (2006) as cited by Warue et al. (2013) agreed with this study's finding, SMEs could not use those advanced methods of budgeting. The authors attributed the SME slow progression into these sophisticated budgeting methods to lack of information and technology systems. The authors further wrote that especially in the developing countries, budgeting process were predominantly undertaken manually or supported by old and outdated technology.

6.2.1.3 Investing

As indicated in the literature review, investments by SMEs is crucially important to ensuring that they grow sustainably. Prakash and Patawari (2014) asserted that investing in fixed assets lead to reduction in operating expenses and promoted sustainability. This study discovered that majority of the entrepreneurs (72%) compared with 28% conducted investment activities in their SMEs.

However, this study established that the majority (52%) of entrepreneurs made use of commercial banks for investing their funds and 42% indicated that their surplus cash was used to invest in their other business interest. Only 6% of the entrepreneurs indicated that they made use of capital markets whilst no entrepreneurs considered government bonds. The finding on low usage of capital market supports Abanis et al. (2013) who also found that very few SMEs invested their surplus cash in market securities. Furthermore, Abanis et al. (2013) highlighted that due to limited capital for SMEs, entrepreneurs find it difficult to build up enough reserves in order to access equity markets especially during the early stages.

The results in table 5.6 further revealed interesting insights into the investment activities by SMEs. The entrepreneurs viewed investments in research and development as significantly important to sustainability of the enterprises. This is in line with Moncada-Paterno-Castello (2012) study, where it was established that SMEs particularly in the developed markets invested extensively in research and development projects. It was also interesting to establish that SMEs invested in human capital development. Chuluunbaatar et al. (2011) further highlighted that there are numerous studies that found a positive relationship between firm's human capital development and the firm's performance.

This study also showed that investment in technology formed part of the activities by SMEs. Feeny (2000) as cited by Yang et al. (2015) emphasized that SMEs should invest in IT resources which includes computers, software together with associated skills and knowledge. Furthermore, it has also been established that information and technology impacted on the performance of the firm (Bayo-Moriones et al., 2013). This view was also supported by Rickards (2008) who found that over 90 per cent of the SMEs regarded good IT support as a key success factor for running an enterprise.

Ashurst et al. (2011) established that although the exploitation of e-business by SMEs has been lagging; their study discovered that, the SMEs that focused on e-businesses achieved positive results through innovation and integration of various business processes. Feeny (2000) as cited by Yang et al. (2015, p. 587) argued that "web-based technologies enable SMEs to compete head-on with their larger counterparts by permitting them to reduce information asymmetry, connect to customers, suppliers, and network infrastructure at low cost and offer new marketing and sales channel". This study concurred with these findings as it was verified that SMEs regarded investment of e-commerce such as website development to be critical to their business success.

The entrepreneurs in the SME sector also considered significantly the use of financial ratios when making investment decisions. This practice is consistent with the SMEs in the developed markets, Abanis et al. (2013) commented on the findings of a study by Block (1997) who conducted a survey of 232 small businesses in the USA. It was established that payback period, internal rate of return and net present value were among the ratios most utilised ratios by SMEs to evaluate financial investment decisions. Hoe (2010) encouraged the SMEs to employ the services of a professional accountant such as financial manager who will be able to assist with such financial matters in order to create more value for the firm.

6.2.2 Conclusion of research question 1:

This study has established that a large number of entrepreneurs do pursue the financial literacy concepts in managing their SMEs. Majority of the findings have confirmed the findings of existing literature regarding the extent to which entrepreneurs pursue financial literacy concepts in the SME sector.

6.3 Research question 2: what is the impact of pursuing financial literacy concepts on economic business success of SMEs?

6.3.1 Findings Research question 2:

The literature revealed that SMEs were faced with a number of challenges in managing their enterprises (Karadag, 2015; Samkin et al., 2014, Abanis et al., 2014). The financial knowledge was established to be part of the factors impacting on the performance of SMEs and this has been identified as one of the major causes of SMEs failure (Nyamboga et al., 2014).

As explained in the results section, SMEs were classified into successful and less successful groups. The classification was based on two indicators of economic success, turnover and number of employees. The SMEs that showed an increase in both turnover and number of employees were regarded as successful and those that indicated that they had no improvement on either turnover or number of employees were deemed to be less successful. This classification was important due to the fact that the extent to which each group made use of financial literacy concepts had to be assessed separately.

The average number of employees for the successful SME increased from seven to 31 from the inception to the current year, whereas the less successful SMEs had 12 as an average number of employees which declined to 11. The results in table 5.9 revealed that the decline in number of employees in the less successful group was insignificant and the successful SME as show in table 5.11 achieved a more significant increase.

The results in table 5.13 proved that there is a significant difference in the manner in which the two groups made use of the three financial literacy concepts. The results in table 5.14 present the evidence that there is a strong correlation between the use of financial literacy and economic success. Thus, this study has demonstrated that entrepreneurs who made greater use of budgeting, investing and borrowing also achieved a significant increase in turnover and number of employees in their SMEs.

The entrepreneurs who revealed that they used financial literacy concepts a lot less, their SMEs did not show an improvement on the turnover or number of employees. This indicates that the use of financial literacy concepts does impact on the economic success of the SMEs.

The finding concurs with Wise (2013) who established that the use of financial literacy tools such as financial statements had a positive impact on the SMEs' ability to repay loans. Furthermore, Nyamboga et al. (2014) demonstrated that entrepreneurs who made use of book keeping, credit management and budgeting skills in their SMEs were able to meet their loan repayment obligations. These finding also concur with the Samkin et al. (2014) who investigated financial skills necessary to manage small business, it was established that financial literacy skills such as proper maintenance of records, management of debtors and creditors were highly correlated with the achievement of higher economic success by SMEs.

6.3.1 Conclusion of research question 2:

The study found that the use of financial literacy concepts does impact on the performance of the SMEs. The entrepreneurs who showed greater use of financial literacy concepts also indicate a significant increase in turnover and number of employees in their SMEs. This finding was consistent with literature as past studies established that the financial literacy concepts led to positive outcomes of the SMEs.

6.4 Research question 3: what is the relationship between each concept of financial literacy and economic business success of the SMEs?

This study established that there is strong relationship between the use of financial literacy concepts and economic success of the SMEs. This research question sought to identify the relationship between each concept and SMEs success. The relationship between each concept was identified by examining the coefficient of each concept following a regression analysis.

6.4.1 Findings of research question 3:

The previous studies established the relationship between financial knowledge and performance of the SMEs. Karadag (2015) identified components of financial management that impacted on performance of small business as capital management, financial reporting and control practices. Samkin et al. (2014) contributed to this subject by demonstrating that factors such as maintaining records of income received, management of debtors and credit sales, management of outgoing and control expenses were critical to running a successful business.

As shown in table 5.17, this study found that the basic equation for economic is: Economic Success =10.338(borrowing) + 8.165(budgeting) + 1.322(investing) - 52.149. However, the analysis revealed that the three financial literacy concepts alone could not be used to predict the economic success of the enterprise. The study however does indicate that there is a positive relationship between each of the financial literacy concepts and economic success of the SMEs. Borrowing, budgeting and investing each has a positive impact of the success of the enterprise, since all the coefficients are positive.

These findings validated and contradicted various studies. The study confirmed the results of the study by Faleti and Myrick (2012) who established that budgets impacted positively on the performance of the employees and resulted in higher sales revenue. Qi (2010) also demonstrated that formal budgets had a positive effect on enterprise performance. Furthermore, King, Clarkson & Wallace (2010) also found evidence that adoption and the extent to which budgets were used influenced performance of the business. Angella (2013) also argued that although SME owners believed that budgeting was important, few SMEs had written budgets and this had a negative impact on the performance of their SMEs. These findings however, contradict the results of the study by Vitner and Heilbrunn (2012) who established that there was no relationship between planning and control process and SME success.

This study further concurs with Fatoki, Olumuyiwa and Herbst (2010) in terms of investment practices. The authors demonstrated that although smaller firms did not make use of complex and sophisticated investment to evaluate the investment decisions, their results revealed that using appraisal techniques to assess investment decisions had an impact on the profitability of the SMEs. Kohn (1997) as cited by Li and Hu (2013) argued that the SMEs that invested in R & D were much more successful than those that did not invest. Furthermore, Yang et al., (2015) also urged SMEs to invest in ICT as these investments had a positive impact on their performance.

6.4.2 Conclusion of research question 3:

This study found that although there is a positive relationship between the concepts of financial literacy and economic success of the SMEs, however, the study showed that the three concepts alone could not be used to explain the performance outcome of the SMEs.

6.5 Research question 4: what is the impact of demographics on the use of financial literacy concepts in SMEs?

This question attempted to establish if demographics have significant impact on the use of financial literacy by entrepreneurs. The demographic factors considered for this study were gender, aged and education of entrepreneurs in the SME sector. The one way ANOVA was utilised to compare the mean scores of the respondents taking into consideration the demographic factors.

6.5.1 Findings of research question 4:

6.5.1.1 Gender

The study found that entrepreneurship in Mpumalanga was dominated by males. As shown in figure 5.8, males made up 74% of the entrepreneurs whilst female only constituted 26%. As indicated in table 5.18, this study revealed interesting phenomenon. The study found that across all three financial literacy concepts, women consistently achieved a lower mean score compared to their male counterparts. This finding concurs with various research studies such as Samkin et al. (2014); Fernero and Monticone (2011); Lusardi et al. (2010) and Lusardi and Mitchell (2011a). These studies established that women around the world had much lower financial literacy levels compared men.

Almenberg and Säve-Söderbergh (2011) posited that this phenomenon could be due to the fact that traditionally, and more so in the developing and undeveloped world, women did not participate in economic decision making process of their households. It is only recently that there has been increased focus on women's participation in economic development activities in the developing countries.

As shown in the results in table 5.19, this study has established that the difference in the use of financial literacy concepts by the two groups was insignificant. Therefore this study has demonstrated that gender of entrepreneurs could not be used to explain the difference in the extent to which males and females made use of financial literacy concepts. This finding supports the findings of Agier and Sazafarz (2013) that gender did not influence borrowing activities of entrepreneurs. In contradiction, Sena et al., (2012) argued that men were more likely to seek external funding for their SMEs than women.

6.5.1.2 Age

The study found that 13% of the entrepreneurs were less than 30 years old. Those with ages between 30 to 40 and 40 to 50 constituted 28% and 30% of the entrepreneurs respectively. The entrepreneurs who were over the age of 50 were represented by 28%. As shown in table 5.23, this study discovered however, that the entrepreneurs below the age of 30 consistently achieved a much higher mean score on all three concepts of financial literacy. The other age groups did not show consistent score across the three concepts. This finding challenges the study by Lusardi and Mitchell (2011b) who argued that the financial literacy levels were much lower in younger people and older generation.

This study found that the age of entrepreneurs could not explain the difference in the use of the financial literacy concepts. This finding contradicts various studies (Lusardi & Mitchell, 2011b; Rooij et al., 2011b; Fernero & Monticone, 2011 and Klapper & Panos, 2011). These studies focused on financial literacy and retirement planning, and all consistently concluded that the older generation were among the highest with low the levels of financial literacy.

6.5.1.3 Education levels

The study established that the majority of entrepreneurs (34%) had matric as their highest qualification. 26% had a diploma as highest qualification, 17% had a degree, and those with a postgraduate degree only constituted 9%.

Based on the results in table 5.22, this study interestingly established entrepreneurs with diplomas influenced the investing activities of their SMEs. This finding concurs with Sucuahi (2013) who found that the individuals with diplomas showed higher financial literacy levels. Those with post degree, degree and matric or less did not have significant influence on the use of financial literacy concepts in their SMEs.

6.5.2 Conclusion of research question 4:

A number of research papers demonstrated that education, aged, and gender influenced the levels of financial literacy of entrepreneurs. This study revealed that gender, age and education do not significantly influence the use of financial literacy concepts by entrepreneurs in the enterprises. The entrepreneurs with diplomas were found to have a significant impact on the investing activities of SMEs.

6.6 Conclusion of the chapter

This chapter discussed the results presented in the previous chapter. The results were critically discussed taking into consideration the extensive literature that was reviewed in the initial chapters. The results of this study largely confirmed the existing literature on financial literacy of entrepreneurs in the SME sector.

Chapter 7: Conclusion

7.1 Introduction

This final chapter of the study presents the main findings of the research and highlights the study's key academic contribution. There are several recommendations made to the key stakeholders such as government, private sector, academics and entrepreneurs themselves. The limitations pertaining to this study are also discussed and finally suggestions for future studies are outlined.

7.2 Research questions

The literature revealed that SMEs are regarded as the key drivers of social and economic development of any country (Karadag, 2015; Abor & Quartey, 2010). SMEs are crucial in wealth creation, increase in GDP and promotion of entrepreneurship (Okpara & Kabongo, 2009; Abor & Quartey, 2010). Countries like South Africa facing low rate of economic growth, high rate of joblessness and abject poverty have to support SME development as these enterprises play a key role in addressing these challenges.

Thus, obstacles impacting on the success of the SME sector have to be well understood and addressed effectively by all key stakeholders. The literature review highlighted financial knowledge as one of the factors impacting on the success of SMEs worldwide (Karadag, 2015). In light of this challenge, this study aimed at contributing to the growing literature on the subject by exploring the financial literacy practices that are pursued by entrepreneurs in the SME sector. Therefore, the purpose of this study was to understand the extent to which entrepreneurs in the SME sector make use of the financial literacy concepts, namely, budgeting, investing and borrowing in managing their business finances. The study also sought to establish the relationship between the use of financial literacy concepts and the economic success of the SMEs.

1. **Research question 1: What is the extent to which the entrepreneurs in the SME sector pursue financial literacy concepts in managing their business finances?**

   The question was intended to establish the extent to which entrepreneurs in the emerging markets such as South Africa make use of the financial literacy concepts.

2. **What is the impact of utilising financial literacy concepts on economic success of the SMEs?**

This research question was designed to empirically establish the impact of pursuing financial literacy concepts on the success of the SMEs.

3. **What is the relationship between each component of financial literacy and the economic success of the enterprises?**

   This research question aimed at establishing the relationship and the significance of each of the three components of financial literacy on performance of SMEs.

4. **What is the impact of demographics of entrepreneurs on the use of financial literacy concepts?**

   The question sought to highlight the demographic factors that influence financial literacy of entrepreneurs.

7.3 Research findings

The findings of this study were to a large extent consistent with the existing literature on financial literacy of entrepreneurs. The results of this study revealed that majority of the entrepreneurs in the SME sector pursued all the three financial literacy concepts in managing their enterprises. The study established that majority of the entrepreneurs used debt to finance their SMEs. This finding supported the findings of Wu et al. (2008) in that commercial banks were the main source of capital for the SMEs. Although the entrepreneurs did take into account, the interest rate being levied on their loans, majority of the entrepreneurs did not differentiate between the long term and the short term debt. Deemsomsak et al. (2009) urged the SMEs to take into cognisance the maturity of debt as this has an impact on the interest paid over time. This study also highlighted the limited use of venture capitalists and government agencies by SMEs to raise capital. This emphasised the challenges that entrepreneurs are faced with concerning these sources of capital. Blumberg and Letterie (2008) wrote that entrepreneurs did not know much about venture capitalist and that is why they only relied on banks.

Consistent with Ahmad and Mohamed (2012), this study confirmed that most SMEs conducted their budgets based on a 12 months cycle and they reviewed their budgets at least once a year. It was further pointed out that entrepreneurs aligned their budgets to their company's objectives and overall strategy. It was interesting to note that entrepreneurs used budgets as part of their employees' performance contracts. This concurred with Pietrzk (2014) finding that most SMEs intended to use budgets to appraise performance of their staff. Cohen and Karatzimas (2011) however had argued that budgets were not used as part of performance evaluation because the human resource departments had limited involvement in the budgeting processes.

This study also found that entrepreneurs predominately used traditional budgeting methods and did not consider other sophisticated methods such as beyond budgeting, better budgeting, rolling forecast and activity based budgeting. This was in contradiction to Østergren and Stensaker (2011) and Zeller and Metzger (2013) who established that most organisations were making use of these advanced budgeting methods. Diamond and Khemani (2006) as cited by Warue et al. (2013) agreed that SMEs could not use those modern methods of budgeting because they lacked the necessary information and technology systems. The authors further highlighted that especially in the developing countries, budgeting process were predominantly undertaken manually or supported by old and outdated technologies.

Consistent with literature, this study revealed that majority of the SMEs conducted investment activities on fixed assets, e-commerce, human capital development and IT infrastructure. Furthermore, the literature (Prakash & Patawari, 2014; Chuluunbaatar et al., 2011; Yang et al., 2015) asserted that these types of investments had a direct impact on operating expenses and sustainability of the enterprises. Thus, SMEs must seek to prioritise investment in these areas to remain profitable and sustainable.

The study discovered that there is a positive relationship between the use of financial literacy concepts and economic success of the SMEs. The entrepreneurs who indicated greater use of financial literacy concepts also revealed that their SMEs achieved significant increase in both turnover and number of employees. Previous studies (Wise, 2013; Nyamboga et al., 2014; Samkin et al., 2014) demonstrated that higher levels of financial literacy led to positive outcomes of the SMEs.

This research study also ascertained that each of the three concepts of financial literacy, namely, budgeting, borrowing and investing have a positive impact on the success of the SMEs. This finding supported the previous studies (Wise, 2013; Nyamboga et al., 2014; Samkin et al., 2014), that demonstrated that financial concepts such as capital management, financial reporting, record keeping, management of debtors and credit sales, management of outgoing and control expenses were critical to the performance of the small businesses.

Hoe (2010) asserted that majority of the SMEs were owner managed and most of them did not have the necessary qualifications to manage their enterprises. Consequently, they relied on their education, practical experience and any prior training to manage their businesses. This study sought to establish if demographic factors had an influence on the use of financial literacy concepts by entrepreneurs. The study, however, found that demographics factors, gender, age and level of education did not have an impact on the use of financial literacy concepts. These findings contradicted the studies of Samkin et al. (2014); Fernero and Monticone (2011); Lusardi et al. (2010) and Lusardi and Mitchell (2011a) who suggested that demographics influenced financial literacy of individuals significantly.

7.4 Academic contribution

Given the importance of financial literacy of entrepreneurs in the SME sector, there has been a significant interest in the subject recently. Majority of previous studies focused on the developed markets and little focus has been paid to emerging markets such as South Africa. Furthermore, the research studies in the South African context (Fatoki, 2014a; Roberts et al., 2012; Oseifuah, 2010; Shambare & Rugimbana, 2012; Kotzé & Smit, 2008) predominately focused on assessing the financial literacy levels of entrepreneurs and the public in general.

To the best of the researcher's knowledge, this was the first empirical study in the country assessing the impact of financial literacy of entrepreneurs on the economic success of SMEs. The findings of the past studies have been confirmed and additional insights were established, therefore this research study has contributed to the growing body of literature on the subject of financial literacy of entrepreneurs in the SME sector in South Africa.

7.5 Recommendations

7.5.1 Government

This study highlighted that although majority of the entrepreneurs make use of the financial literacy concepts, a large number of entrepreneurs still do not pursue these concepts in their SMEs. In order to foster sustainable growth and achieve a vibrant SME sector in South Africa these shortcomings ought to be addressed.

It is therefore necessary for the government agencies such as Small Enterprise Development Agency (SEDA) and Industrial Development Corporation (IDC) to develop training programs focusing on improvement of the SMEs financial knowledge. The financial development programs should include topics like budgeting, borrowing and investing practices by SMEs. This report could be used to provide insights into the areas of focus concerning the use of financial literacy concepts by entrepreneurs.

7.5.2 Private sector

This study revealed that not all SMEs paid attention to basic financial matters such as maturity period of debt. Commercial banks should establish programs to improve financial knowledge of entrepreneurs in the SME sector. The study also highlighted the lack of awareness by SMEs regarding other sources of capital such as ventures capital funds and government agents. Institutions such as the Johannesburg Stock Exchange (JSE) and venture capitalists themselves should institute developmental programmes for entrepreneurs so that they are made aware of the other available sources of capital so that SMEs do not only rely on debt from commercial banks.

7.5.3 Educational institutions

The academic institutions should focus on education and development programs aimed at improving financial literacy of entrepreneurs. This subject of financial literacy should be presented to everyone from an early age as soon as possible. Presently, financial education is only offered to management and business students at universities across South Africa (Fatoki, 2014b).

7.5.3 Entrepreneurs

Entrepreneurs themselves also need to improve their financial management knowledge through training and development. SMEs should establish networks within their industry in order to share knowledge, best practices and skills in terms of financial management. This study established that majority of the SMEs conducted investment activities on e-commerce, human capital development and IT infrastructure. The entrepreneurs are therefore encouraged to invest in these types of investments as they impact on the profitability and sustainability of their enterprises.

7.6 Limitations of the study

The limitations for this research study were as follows:

- The research design, being quantitative and descriptive in nature and only used closed ended questions, this could have limited the respondents to express their full views and additional insights on the subject.
- This study was limited to the SMEs from one database. These SMEs only operated in the mining industry. It is possible that these findings are only applicable to these firms in Mpumalanga Province and therefore, could not be generalised to all the industries.
- The respondents in this study were either managers or owners, this had a potential for self-serving bias. This kind of biasness could result in respondents indicating views that put them in a better position than they actual are.

7.7 Suggestions for further studies

- The research design was quantitative and descriptive in nature. The used closed ended questions through a questionnaire could limit the respondents to express their full views on the subject. Therefore future studies could be conducted through a different research design, for example qualitative.
- As mentioned previously this study only considered SMEs from the one database, one province and one industry. Therefore, the future studies may consider adopting a more broaden sampling approach and consider other industries such construction, services, tourism, etc.
- This study only considered demographic factors such as age, education and gender. Future studies could consider including Indians, Jewish, black or white to establish if any significant difference exists in the use of financial literacy concepts across cultures.

7.8 Final thoughts

South Africa is faced with many social and economic challenges. This includes slow economic growth, high rate of unemployment, extreme levels of inequalities and abject poverty. It is widely accepted that SME sector play a crucial role in addressing these socioeconomic challenges. The South African government has acknowledged through the NDP that majority of the challenges going forward will have to be addressed by the development of a vibrant SME sector. The NDP (National Planning Commission, 2012) wrote that the service sector and the domestic orientated activities will have to create a large portion of these jobs, with at least 90% being created by small and expanding businesses.

This means that concerted effort is needed into the development of the SME sector in South Africa. Therefore, key stakeholders such as government agencies, commercial banks, venture capitalists and academic institutions need to come up with creative ways to improve the success rate of this sector. Financial knowledge has been cited as one of the reasons why SMEs fail. This study provided key insights into challenges and shortcomings that are faced by these small businesses regarding financial knowledge and skills. This study could be used by the key stakeholders to develop initiatives specifically aimed at assisting entrepreneurs to improve their financial literacy levels, particularly around budgeting, investing and borrowing activities.

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Appendix 1: Research questionnaire

Consent for participation in an academic research study

Gordon Institute of Business Science

Financial Literacy Levels of Entrepreneurs

Dear Respondent

Thank you for participating in this research study

I am an MBA student at the Gordon Institute of Business Science and currently conducting an academic research on the financial literacy of entrepreneurs in the Small and Medium Enterprises sector in Mpumalanga Province.

Please note the following:

- This study involves an anonymous survey. Your name will not appear on the questionnaire and the answers you give will be treated with strict confidentiality.
- You cannot be identified in person based on the answers you give.
- By completing survey you indicate that you are voluntarily participating in this research. You may choose not to participate.
- Please answer the questions as completely as possible.
- This questionnaire consists of 6 pages and should only take you not more than 30 minutes of your time.
- The results of the study will be used for academic purposes. A summary of the research findings can be provided to you on request.

If you have any concerns or questions with regards to the research, please contact me or my supervisor. Our details are as follows:

Researcher name: Luambo Musie
E-mail: luambomusie@gmail.com
Phone: 082 656 3548

Research Supervisor Name: Thembie Ntshakala
E-mail: thembie.ntshakala@gmail.com
Phone: 083 445 9961

Financial Literacy of Entrepreneurs in South Africa

Thank you for taking the time to complete this questionnaire. The aim of this survey is to examine financial literacy levels of entrepreneurs. The findings of this research study will assist government and SME development agencies to better understand challenges faced by entrepreneurs as far as financial management is concerned. The insights from this study will inform government and SMEs agencies to develop effective programmes that can better equip entrepreneurs with appropriate financial management skills in order to operate successful enterprises.

The questionnaire is divided into five sections

Section A: Demographic Information

Section B: Company Information

Section C: Budgeting

Section D: Investing

Section E: Borrowing

Section A: Demographic Information

(Please mark the appropriate box with an X or click once to check or un-check a box)

1. Gender

Female	☐	1
Male	☐	2

2. Age

(Write answer in space provided below)

Less 30	☐	1
Between 30 and 40	☐	2
Between 40 and 50	☐	3
Older than 50	☐	4

3. Please indicate your highest level of academic qualification

Postgraduate degree	☐	1
Degree	☐	2
Diploma	☐	3
Matric	☐	4
Less than Matric	☐	5

Section B: Company Success

4. How many years has the business existed? *(Write answer in space provided below)*

	1

5. How many employees worked for you when the business was started? *(Write answer in space provided below)*

	1

6. How many employees are there currently in the business? *(Write answer in space provided below)*

	1

7. How much was the business turnover in the very first financial year when the business started? *(Please mark the appropriate box with an X or click once to check or un-check a box)*

Less than R500 000	☐	1
R500 000 – R5 000 000	☐	2
R5 000 000 – R10 000 000	☐	3
R10 000 000 – R20 000 0000	☐	4
R20 000 000 - R51 000 000	☐	5
Above R51 000 000	☐	6

8. How much is the business turnover in the most recent previous financial? *(Please mark the appropriate box with an X or click once to check or un-check a box)*

Less than R500 000	☐	1
R500 000 – R5 000 000	☐	2
R5 000 000 – R10 000 000	☐	3
R10 000 000 – R20 000 0000	☐	4
R20 000 000 - R51 000 000	☐	5
Above R51 000 000	☐	6

Section C: Budgeting

This section of the questionnaire allows us to understand extent to which you conduct budgeting in your business.

(Please mark the appropriate box with an X or click once to check or un-check a box)

9. Do you conduct operating business planning or budgeting process?

Yes	☐	1
No	☐	2

10. If answered yes to question 9, please rate the following statements as per scale below

Rating Scale

a = Strongly disagree
b = Disagree
c = Neutral
d = Agree
d = Strongly Agree

		a	b	c	d	e	
i	Enterprise develops business objectives to be achieved in a year	☐	☐	☐	☐	☐	1
ii	Enterprise consistently prepares operational budgets on a predetermined basis, e.g. bi- annual, annual, etc.	☐	☐	☐	☐	☐	1
iii	The business prepares the budget beginning of the financial year and review at year end	☐	☐	☐	☐	☐	3
iv	Budgets form a basis for employee performance contracts	☐	☐	☐	☐	☐	4
v	There is strong alignment of the budget to the company strategy	☐	☐	☐	☐	☐	5
vi	Enterprise makes use of budgeting process such as activity based budgeting, beyond budgeting, rolling budget instead of traditional budgeting	☐	☐	☐	☐	☐	7

11. What is your budget planning time horizon?

Less than 12 months	☐	1
12 months	☐	2
2 years	☐	3
Greater than 3 years	☐	4

Section D: Investing

This section of the questionnaire allows us to understand extent to which you conduct investing activities in your business.

(Please mark the appropriate box with an X or click once to check or un-check a box)

12. Does the company invest some of its profits in assets to ensure business sustainability

Yes	☐	1
No	☐	2

13. If yes to question 12, please rate the investing activities of the business

Please rate the following statements as per scale below

Rating Scale

a = Strongly disagree
b = Disagree
c = Neutral
d = Agree
d = Strongly Agree

		a	b	c	d	e	
i	Enterprise invests its surplus cash to in order generate more income in the future	☐	☐	☐	☐	☐	1
ii	Consideration of financial measures such as NPV, IRR and ROA is important before committing to an investment	☐	☐	☐	☐	☐	2
iii	Enterprise makes use of third party to conduct investment for the business	☐	☐	☐	☐	☐	3
iv	Investing in e-commerce infrastructure such as internet website is critical to the business success	☐	☐	☐	☐	☐	2
v	Company invests in Research and Development initiatives.	☐	☐	☐	☐	☐	3
vi	Company invests in human capital development, e.g. training of staff	☐	☐	☐	☐	☐	4

14. Where does the company investment in surplus cash?

Market securities (JSE)	☐	1
Commercial Banks	☐	2
Government Bonds	☐	3
Other Business enterprises	☐	4

Section E: Borrowing

This section of the questionnaire allows us to understand extent to which you use the components financial literacy in managing your business.

(Please mark the appropriate box with an X or click once to check or un-check a box)

15. Does the company borrow money to fund its operations?

Yes	☐	1
No	☐	2

16. If answered yes to question 15, please rate your business borrowing activities?

Please rate the following statements as per scale below

Rating Scale

a = Strongly disagree
b = Disagree
c = Neutral
d = Agree
d = Strongly Agree

		a	b	c	d	e	
i	Company consider cost of borrowing i.e. interest rate before taking on a loan	☐	☐	☐	☐	☐	1
ii	Financial ratios such Debt to Equity are considered before taking out a loan	☐	☐	☐	☐	☐	2
iii	Enterprise splits long term and short debt in order to manage the its balance sheet	☐	☐	☐	☐	☐	3
iv	Tax benefit is taken into consideration when deciding on optimal capital structure of the firm	☐	☐	☐	☐	☐	4
v	Enterprise is fully conversant with the process to acquire funding from different financial institutions	☐	☐	☐	☐	☐	5

17. Where does the company borrow from?

Commercial banks	☐	1
Friends and Family	☐	2
Venture Capitalists	☐	3
Government agencies	☐	4

End of questionnaire,

Thank you very much for taking the time to complete this questionnaire

Appendix 2: Consistency matrix

PROPOSITIONS/ QUESTIONS/ HYPOTHESES	LITERATURE REVIEW	DATA COLLECTION TOOL	ANALYSIS
1. What is the extent to which entrepreneurs in the SME sector pursue financial literacy concepts	Hyz (2011); Deesomsak et al (2009); Fatoki (2012); La Rocca et al (2011); Strielkowski (2012)	Questions 9, 11, 12, 14, 15 and 17	Descriptive Statistics and one sample test
2. What is the impact of pursuing financial literacy concepts on economic success of SMEs	Abanis et al. (2014); Samkin et al. (2014); Wise (2013); Nyamboga et al. (2014)	Questions 5, 6, 7, 8, 10, 13 and 16	Descriptive statistics, paired sample t-test and Spearman's rho correlation Analysis
3. What is the relationship between each concepts of financial literacy and SME economic success	Karadag (2015); Samkin et al. (2014); Li and Hu (2013); Yang et al. (2015)	Questions 5, 6, 7, 8, 10, 13 and 16	One way ANOVA and Linear Regression Analysis
4. What is the impact of demographics on the use of financial literacy concepts	Fernero & Monticone (2011); Lusardi et al. (2010) Lusardi & Mitchell (2011a); Almenberg & Sazafarz (2013); Fernero & Monticone (2011); Klapper & Panos, 2011); Sucuahi (2013)	Questions 1, 2, 3, 10, 13 and 16	Descriptive statistics, one way ANOVA, and Tukey HSD

Appendix 3: Ethics approval letter

Gordon Institute
of Business Science
University of Pretoria

Dear Luambo Musie

Protocol Number: **Temp2016-01373**

Title: **Financial Literacy of Entrepreneurs in the Small and Medium Enterprise Sector in Mpumalanga Province, South Africa**

Please be advised that your application for Ethical Clearance has been APPROVED.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Kind Regards,

GIBS Ethics Administrator

Appendix 4: Turnitin report