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Business planning and entrepreneurial education: key drivers for SME performance in South Africa's Gauteng Province

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Business planning and entrepreneurial education: Key drivers for SME performance in South Africa's Gauteng Province

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A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in Entrepreneurship and New Venture Creation

Abstract

The answer to South Africa's unemployment, poverty, and inequality lies in the success of Small and Medium Enterprises. It is thus of the utmost importance that inhibiters of SME growth are studied to be able to chart a high-growth trajectory. The objective of the study is to investigate the perceptions of Gauteng-based entrepreneurs on the contribution of business planning and entrepreneurial education to SME performance. The findings form a basis for necessary remedial actions. The study investigated business planning capabilities and entrepreneurial education as antecedents to exploitation of diverse utilitarian resources which create unique organisational competitive advantages. The study chose financial performance and employment growth as key indicators for firm performance. It used a quantitative method which adopted an exploratory approach. Primary data was collected from a final sample of 268 entrepreneurs through a self-administered questionnaire.

What emerged from the data was a significant but weak impact between business planning and firm success. The impact of entrepreneurial education on firm performance was not supported and insignificant. According to the study results, more practice in business planning will lead to increased firm performance, even in the absence of entrepreneurial education. The entrepreneurs paid more attention to financial performance than to growing employee numbers, attesting the SME survival orientation. The absence of entrepreneurial education and presence of weak business planning retard the much-needed economic growth. This study contextualises a framework of the interconnectedness of business planning, entrepreneurial education, and firm performance.

The value that budding entrepreneurs can draw from this study is that strong business planning capabilities precede entrepreneurial performance. The government should entrench entrepreneurial culture through legislating entrepreneurial education at all levels of education, including SME support programmes.

Keywords: SME, business planning, entrepreneurial education, firm performance

Declaration

I, Trustlord Marecha, declare that this research report is my own work, except as indicated in the references and citations. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in Entrepreneurship and New Venture Creation, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Signed at …….*Johannesburg*

On this 29th day of September 2020

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The sterling guidance and support of my supervisor, Dr Murimbika, whose academic prowess is exceptional kept me focused. His thought-provoking academic critiquing offered guidance and stimulated my academic appetite.

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Abbreviations

BP	Business planning
EE	Entrepreneurial education
FP	Firm performance
SME	Small and medium enterprises

Chapter 1: Introduction

1.1 Background

This study investigates the impact that business planning and entrepreneurial education have on driving SME performance in Gauteng province. The rate of SME stagnation and failure in Gauteng is noticeably high (Gomera, Chinyamurindi, & Mishi, 2018).

Formal business planning (BP) positively responds to uncertainties imposed by environmental constraints (Schmitt, Rosing, Zhang, & Leatherbee, 2017). Opportunities and competitive advantages are increasingly becoming temporary (Hopp & Greene, 2018), hence business planning enhances change management, and a clearly mapped out entrepreneurial journey (Brinckmann & Kim, 2015). Absence of planning fuels failure (Larsen, Lindhard, Brunoe, & Jensen, 2018).

Entrepreneurial education (EE) is key in developing entrepreneurial capabilities (Hien & Cho, 2018) which enhance firm performance (FP) (Raposo & Do Paço, 2011). Business planning and entrepreneurial education are unique key drivers in the process of resource acquisition and development of capabilities that enhance overall resource allocation and utilisation (Bacq & Eddleston, 2018). Unique firm resources are key drivers for sustainable competitive advantages for new small firms because resources outweigh products, since uniqueness of inputs determines uniqueness of outputs in successful entrepreneurship (Alvarez & Busenitz, 2001; Barney, 2001).

Entrepreneurship is defined as identifying and exploiting opportunities through a series of many activities (Wei, Long, & Li, 2018; Barreira, Dhliwayo, Luiz, & Urban, 2018). The complete circuit of entrepreneurship entails a re-combination of resources to add value for the end user (Aeeni, Motavaseli, Sakhdari, & Dehkordi, 2019). The environments in which entrepreneurial activities take place have become increasingly volatile. The instability of external macro environments poses serious threats to the existence, survival, and growth of small and medium enterprises (SMEs). SMEs are key contributors to employment in any economy (Larsen, Lindhard, Brunoe, & Jensen, 2018). Research suggests that South Africa's SMEs contribute 60% of labour force and a national Gross Domestic Product (GDP) of 34% (Abor & Quartey, 2010).

The contribution of SMEs to the national economy is of paramount importance in creating more employment, improving quality of livelihoods, offering improved incomes, reducing poverty, and improving societal equality (Barreira, Dhliwayo, Luiz, & Urban, 2018).

It can therefore be argued that the capability to re-configure inputs to attain desired outcomes, sustainably and profitably in a volatile business environment, demands active business planning (Larsen, Lindhard, Brunoe, & Jensen, 2018; Osiyevskyy, Costa, & Madill, 2016; Brinckmann & Kim, 2015). Planning entails the dimensions of strategic and continuity business planning, which ensures the capability to survive seismic changes in the market, and the propensity to improve organisational performance. This study's investigation is based on the theoretical foundations of the Resource-Based-View (Barney, 2001).

It can therefore be argued that the capability to re-configure inputs to attain desired outcomes, sustainably and profitably in a volatile business environment, demands active business planning (Larsen, Lindhard, Brunoe, & Jensen, 2018; Osiyevskyy, Costa, & Madill, 2016; Brinckmann & Kim, 2015). Planning entails the dimensions of strategic and continuity business planning, which ensures the capability to survive seismic changes in the market, and the propensity to improve organisational performance. This study's investigation extends the empirical studies of Brinckmann, Dew, Read, & Mayer-Haug (2019) who argue that the antecedents, reasons, and processes of BP determine the level at which business planning stimulates firm performance. The study also extends the argument that entrepreneurial education capacitates people's entrepreneurial orientation (Neck & Corbett (2018). Neck & Corbett (2018) contend that EE directly impacts people's proficiencies thereby positively impacting quality of new ventures and their performance.

Empirical studies found that the level of business planning depends on the entrepreneur's exposure to entrepreneurial education (Carland & Carland, 2003; Barney, 2001). Entrepreneurs acquire entrepreneurial knowledge through academic education or skills through entrepreneurial training, or a combination of both. Depending on the quality of business planning, it leads to productive, unproductive, or destructive entrepreneurial activities, all of which impact economic performance differently (Aeeni, Motavaseli, Sakhdari, & Dehkordi, 2019).

Creating, growing, and sustaining productive small businesses is crucial to the creation of employment and economic growth in South Africa's Gauteng province (SEDA, 2018; Gomera, Chinyamurindi, & Mishi, 2018; Barreira, Botha, & Oosthuizen, 2015). Small and medium enterprises (SMEs) make up the biggest portion of businesses in developed and developing economies, and they absorb the largest number of employees (Molefe, Meyer, & De Jongh, 2018; GEM, 2015). Small business in South Africa contributed an additional 17% employment in 2015 though employment growth was below global standards by more than 50% (TIPS, 2017). The hope for improving development of the emerging economies is in the emergence of successful small businesses (Herath & Mahmood, 2014). Considering the significant role played by SMEs, the government must create an enabling environment that facilitates economic development (Maleka & Fatoki, 2016). Economic development arrests social ills such as unemployment, crime, inequality, and poverty (Urban, 2013; Minai, Raza, Bin Hashim, Zain, & Tariq, 2018).

1.2 Context of the study

Gauteng experiences accelerated urbanisation, conveniently locating it for high SME activity (Beder, Oosthuizen, Reddy, & Venter, 2017). Gauteng has more than 800 000 SMEs – more than any other province in the country (SEDA, 2018); however, according to Seeletse (2012) as cited by Galawe (2017) the main concern is their failure to cope with the rise of job seekers. The prevalence of low SME employment rates and persistence of necessity-driven ventures persuades this study to inquire into the impact of BP and EE on the cognitive capacity of individuals in business and their corresponding influence on enhancing high growth performance.

SMEs in Gauteng crowd themselves around similar, or, at worst, the same kinds of business (SEDA, 2018). This means there is a lack of creativity among individuals (Barreira, Dhliwayo, Luiz, & Urban, 2018). There is a prevalence of 'me-too' behaviour in the province. Such behaviour leads to quick saturation of markets and ultimate stagnation and premature death of businesses. This gives rise to a need for equipping entrepreneurs and would-be entrepreneurs with entrepreneurial education and dynamic business planning capabilities to foster a futuristic entrepreneurial culture that influences high-growth businesses.

It is important to note early in this study that different stakeholders define SME performance differently. Academia has a theoretical view of performance (Bachmann, Engelen, & Schwens, 2016; Bracker & Pearson, 1986; Carland & Carland, 2003; Hernandez-Sanchez, Sanchez-Garcia, & Mayens, 2019) and government has an economic view (Kumar, 2014; TIPS, 2017; GEM, 2017), while the entrepreneurs' view is survivalist (Urban & Gaylard, 2017; Barreira, Botha, & Oosthuizen, 2015).

It is important to converge meanings and definitions of firm performance and business planning to aid the alignment of business planning to successful entrepreneurial activities. However, the inconclusiveness of definitions offers room for further research into the constructs in pursuit of firm performance's key role in economic growth (Gibson & Cassar, 2005).

South Africa has high entrepreneurial competitiveness and innovativeness as compared to other countries in sub-Saharan Africa (GEM, 2015). However, business growth and sustainability normally stagnate, or even fail (Barreira, Dhliwayo, Luiz, & Urban, 2018). This can be ascribed to the quality of education prevalent in the country (Matsinhe, 2016). Low literacy levels have been identified as a leading cause for the poor economic performance, hence education has become a key driver to instil entrepreneurial performance (Ikebuaku & Dinbabo, 2018; Matsinhe, 2016; SEDA, 2018).

Unemployment was found to have risen by as little as 29% in South Africa (SEDA, 2019), and as such, SMEs are looked upon to solve this problem by growing the sizes of their businesses and create 90% more jobs by 2030 (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018). Gauteng, being the most populous province, has a significant proportion of the unemployed population (Urban, 2013). This study emphasises the need for offering specific entrepreneurial education to targeted groups from as early as high school, but most importantly, custom-tailored entrepreneurial education needs to be provided for practising entrepreneurs.

1.3 Theoretical foundation

Extant literature emphasise that venture success results from efficiency-driven resource allocation and management (Castrogiovanni, 1996; Alvarez & Busenitz, 2001; Brinckmann, Dew, Read, & Mayer-Haug, 2019). The Resource-Based-View (RBV) therefore becomes crucial in understanding the role of business planning and

entrepreneurial education as drivers of competitive advantages through sufficiency and efficiency in resource allocation in relation to firm performance (Peteraf, 1993). The RBV theory was derived from the theory of firm growth (Penrose, 1959) by Birger Wernerfelt (1984), and was made popular by Jay Barney (1991). Barney (2001) posited that entrepreneurs must respond to market forces by adjusting the allocation of their resources accordingly, depending on their capabilities. Capabilities are honed by the quality of education one received (Amadi-Echendu, Philips, Chodokufa, & Visser, 2016).

Business planning is a cornerstone activity that determines appropriate action plans in the presence of or scarcity of information, or in uncertainty (Shrader, Taylor, & Dalton, 1984). Extensive empirical research has been carried out with attention on its consequential effect on firm performance (Ackelsberg & Arlow, 1985; Brinckmann & Kim, 2015) which has been found by other researchers to depend on diverse antecedents like human capital, especially education (Mengel & Wouters, 2015; Brinckman, Dew, Read, & Mayer-Haug, 2019). However business planning has been criticised for its negative impact on time opportunity cost, in which planning activities hamper the entrepreneur's participation in daily activities thereby inhibiting venture emergence and growth (Bewayo & Fiol, 2010).

Though there are contentions on the impact of business planning and entrepreneurial education as integral resources of a firm have on venture success, Brinckman, Dew, Read, and Mayer-Haug (2019) argue that the presence of resources does not guarantee success unless their allocation is well planned for. Their argument is echoed by Aeeni, Motavaseli, Sakhdari, and Dehkordi (2019) who posit that entrepreneurial acitivities that lack explicit allocation contribute to firm's poor performance.

1.4 Problem statement

A significant number of small and medium enterprises fail within their first two years, while the survivors are motivated to reach contentment of family needs (Carland & Carland, 2003). They reach their contentment and stagnate, ceasing to plan for any further growth. The stagnation is imposed by a lack of capabilities on business planning (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018). Business planning capabilities are stifled by the absence of entrepreneurial education (Raposo & Do Paço, 2011) in South Africa. Poor

business planning, or the lack thereof, leads to poor business performance and aggregate poor economic results in the country (Barreira, Botha, & Oosthuizen, 2015).

The government of South Africa created departments and agents such as the Small Enterprise Development Agency (SEDA), the Small Enterprise Finance Agency (SEFA), the South African Micro-Finance Apex Fund (SAMAF), the National Youth Development Agency (NYDA), and the Technology and Innovation Agency (TIA) to implement its small business strategy (Bureau for Economic Research, 2016). SEDA assists SMEs with business planning to promote access to funding, capitalise on delivery and service delivery networks, compete locally and internationally, and to initiate a national entrepreneurial drive through entrepreneurial education and training (SEDA, 2018). In the presence of such numerous interventions, SME performance has failed to improve in that the failure rate remain unchanged (Rungani & Potgieter, 2018). The economy has continued to contract by 0.5% between 2018 and 2019 Quarter 1 (SEDA, 2019), and the growth remains low (Bureau for Economic Research, 2016).

1.5 Objective of the study

The objective of this study is to investigate how business planning and entrepreneurial education contribute to driving SME performance in Gauteng province, South Africa.

1.5.1 Primary objective

The objective derives from the prevailing SME performance, which lacks expected contribution to overall economic performance. Overall economic performance in this study means employment growth and financial performance. The leading causes of the prevailing problematic entrepreneurial behaviour are a lack of intense and sophisticated business planning capabilities (Carland & Carland, 2003) and low literacy levels or low levels of entrepreneurial education (Barreira, Botha, & Oosthuizen, 2015). Entrepreneurial education investigated in this study is formal theoretical pedagogy in education about entrepreneurship and education for entrepreneurship (Musetsho & Lethoko, 2017). The two forms of education fit into lower and tertiary education respectively. Entrepreneurial education improves entrepreneurs' confidence, autonomy, and overall firm performance (Welsh & Drăguşin, 2011). The study seeks to emphasise business planning and entrepreneurial education literature in the South African context as

antecedents to SME performance, which will lead to the attainment of aggregate national economic well-being (Asghar, Gul, Hakkarainen, & Taşdemir, 2019).

1.5.2 Breakdown of the primary objective

1. To investigate the perceptions of small business owners and managers on the importance of business planning.

2. To investigate the perceptions of SME owners and managers on the importance of entrepreneurial education.

3. To determine the importance of entrepreneurial education in capacitating autonomy and performance in business owners and managers.

1.6 Research questions

- To what extent does business planning contribute to SME performance in Gauteng province?
- To what extent does entrepreneurial education contribute to SME performance in Gauteng province?
- To what extent does entrepreneurial education enhance entrepreneurs' autonomy and performance in their ventures?

1.7 Motivation of the study

The contribution of SMEs to the economy is measured through many factors, including GDP, employment, and financial growth (Beder, Oosthuizen, Reddy, & Venter, 2017). In South Africa, SME performance remains below government expectations (GEM, 2017; Carland & Carland, 2003). South African SMEs contribute 56% of the workforce, which is relatively low as compared to SMEs in low- and middle-income countries where they contribute 70% and 95% respectively (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018). SME contribution to GDP has been shrinking over the years, from 50% in 2010 to 45% in 2014 according to Finscope (2010) as cited by Galawe (2017), and 39% in 2016 (Bureau for Economic Research, 2016), while SMEs in low and middle-income countries contribute 60% and 70% respectively. The recessionary spiralling in GDP shows a declining economic growth (SEDA, 2019). The conundrum of SME performance in South Africa stems from the fact that entrepreneurial intentions have declined from 15.4%

to 10%, nascent entrepreneurial rate dropped by 30%, and total entrepreneurial activity dropped by 25%, which is 2.5 times lower than the rest of Africa (GEM, 2017).

The study therefore investigates how SMEs implement formal business planning through the growth stages of their ventures. Prolonged business plans lead to inertia, missing opportunities for funding, scaling, and sustainability. Business planning is executed differently in new small firms than in mature small firms because new entrants plan informally, entirely relying on the owner, while mature firms gain some formal planning experience through networking with funding and other institutions (Gibson & Cassar, 2005). The study seeks to investigate how business planning drives venture performance against seismic global changes and enhance the entrepreneurs' performance. Entrepreneurs who received entrepreneurial education practise timely business planning with ease (Hien & Cho, 2018). This study investigates two components of business planning, namely strategic (Carland & Carland, 2003), and continuity (Bracker, Keats, & Pearson, 1988). These components have a varying impact on overall firm performance (Brinckmann, Dew, Read, & Mayer-Haug, 2019).

1.8 Significance of the study

Existing literature provides evidence of the effect of entrepreneurial education as an antecedent for enhancing intensity of business planning activities (Amadi-Echendu, Philips, Chodokufa, & Visser, 2016). Business planning, in turn, enhances entrepreneurial culture, capabilities (Hannon, 2019; Brinckmann, Dew, Read, & Mayer-Haug, 2019), and competences (Amadi-Echendu, Philips, Chodokufa, & Visser, 2016). This study investigates the impact of business planning and entrepreneurial education on SME performance.

Conventional business planning is done informally and in that way is effective in attaining temporary competitive advantages. Planning for sustainability as an end rather than a means to an end is a subtle trap that stagnates entrepreneurs once they secure family incomes and security. To go beyond sustainability, entrepreneurs need to be cognisant of the ever-shifting market environments, hence the need for dynamic business planning.

This study encourages academia to create and evolve literature on business planning and entrepreneurial education in the South African context. New literature should emphasise planned introduction and modification of products/services and processes. The

entrepreneurs' capabilities in self-evaluations, acknowledgement of milestones, benchmarking against market peers, and development of game-changing plans will improve (Urban & Maphalala, 2018). The new knowledge should aim at reversing the culture of overdependence on conventional informal business planning. The desired cultural change requires business planning capabilities which help through the achievement of the government's vision to attain employment and equality by 2030 (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018).

Academia needs to develop literature that government agents responsible for small business development will use to evolve the content and context of their financial and non-financial support material. Support material must emphasise seismic global changes and their impact on businesses. It must address the timing of the development and the practice of business planning (Wei, Long, & Li, 2018).

Entrepreneurs will understand the importance of business planning as a transient competitive advantage which enhances risk and loss avoidance (Wei, Long, & Li, 2018). The practice of business planning from the inception of a firm influences its capabilities in introducing products and services that enhance market positioning. Timely business planning increases the firm's legitimacy and recognition, which positively contributes to high growth capabilities. Businesses with a culture of timely business planning have a propensity to create employment growth. The markets or competition are no longer local, but global – hence the need for entrepreneurs to practise business planning accordingly.

The government needs to revisit and revise the basic education curriculum to add entrepreneurship as a key driver to develop a more job-creating than a job-seeking national culture. The subject of business studies in high schools should be revised to become more entrepreneurial. Entrepreneurship should be a compulsory subject for all disciplines at all tertiary institutions. Graduates with entrepreneurship education are more likely to start and run their own businesses as a career than those without it (Barreira, Dhliwayo, Luiz, & Urban, 2018). Entrepreneurial education will develop entrepreneurial capabilities which will influence the quality, intensity, and sophistication of business planning in the graduates and would-be entrepreneurs (Barreira, Botha, & Oosthuizen, 2015).

Policy on small business development will evolve to promote proactive business planning foundations as deliverables of the government-appointed agencies and departments.

Existing entrepreneurs and graduates who do not have entrepreneurship education will have an opportunity to benefit from revised content delivered by business incubators and accelerators.

Prior researchers developed literature on the measurement of performance between planners and non-planners, and formal and informal planners (Bracker & Pearson, 1986). Bracker & Pearson (1986) found that those who plan are associated with positive firm performance. The proposed national approach to entrepreneurship will increase the number of good business planners and the result will be increased employment, improved lives, and improved economic growth.

1.9 Delimitations of the study

The study investigates the business planning activities of South Africa's SMEs, but focuses only on Gauteng, since it has the highest number of formal SMEs while other provinces have more informal than formal SMEs (SEDA, 2018). As such, businesses that are thriving elsewhere in the country but have no presence in Gauteng do not form part of the sample in this study. Future studies can consider the national sample to enhance generalisability of results.:

This study acknowledges the SMEs' claims of environmental constraints to their efficacious dispositions (Herath & Mahmood, 2014) but only investigates the strategic and continuity components of business planning activities (Davidsson & Garonne, 2016). It also explores how entrepreneurial education enhances firm performance (Asghar, Gul, Hakkarainen, & Taşdemir, 2019).

The study excludes small unregistered businesses because they are difficult to investigate. They are often not registered in the databases of incubators, accelerators, funding institutions, or business associations, making it difficult to get their contact details. They are also associated with limited economic impact (Bracker & Pearson, 1986). The study seeks to investigate the nature of business planning in the African context for SMEs in Gauteng province and investigates the impact of the entrepreneurs' entrepreneurial education on the quality of business planning (GEM, 2017). Location, gender, owner's age, firm age, and educational level are key demographics collected in the study.

1.10 Definition of terms

- **SMEs** employ between 5 and 49 employees (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018). They are categorised as small if they employ 4–9, and medium if they have 10–49 employees. Those employing 1–4 and more than 50 employees are micro and large businesses respectively. However, the Bureau for Economic Research (2016) defined SME categories according to firm turnover (ZARm) cut-off points per business sector where number of employees go beyond 500. The categories are micro (2m), small (57m), medium (304m), and large (608m). The SEDA reports also use lower boundaries of firm turnover (ZARm) to categorise the SME sizes according to the industry it operates in, and the number of employees go beyond 600. According to SEDA (2018; 2019), the classifications are micro (2m), small (75m), medium (400m), and large (638m).
- **Business planning** entails a well-thought-out course of action aimed at identifying pitfalls, capturing key resources, and acquiring capabilities for a business or business owner to capitalise on business opportunities and evade threats (Gibson & Cassar, 2005; Carland & Carland, 2003; Davidsson & Garonne, 2016).
- **Entrepreneurial education** is the formal business education aimed at producing graduates empowered with business knowledge that leads to high business performance (Cho & Lee, 2018; Ikebuaku & Dinbabo, 2018).
- **SME performance** includes financial gains and growth measured year on year. Such growth should be accompanied by an increase in jobs created (Gibson & Cassar, 2005; Gomera, Chinyamurindi, & Mishi, 2018; Cho & Lee, 2018).

1.11 Assumptions

- The study sample would find the research instrument easy to comprehend.
- The survey participants provided adequate responses useful for hypothesis testing.
- The survey participants had adequate knowledge of business planning.
- The respondents had reasonable knowledge about entrepreneurial education.
- The survey respondents were willing to participate and had ample time to respond.

Chapter 2: Literature review

2.1 Introduction

This chapter investigates extant literature to provide a theoretical review of business planning and entrepreneurial education and their impact on SME firm performance. The chapter elaborates on components of business planning, namely strategic and continuity planning. The types of entrepreneurship education being discussed are formal entrepreneurial education and entrepreneurial training. Extant literature was reviewed from which hypotheses were formulated to explain the correlation between business planning, entrepreneurial education and firm performance.

The findings from the existing literature form the basis of the argument that business planning and entrepreneurial education have not permeated to the SMEs of Gauteng. The lack of high-quality business planning and entrepreneurial education impedes the creation of high-growth innovation-driven business ventures (Matsinhe, 2016). Should these key drivers be either absent or present but weak, SMEs will experience under-performance. The prevalence of poor venture performance in Gauteng province compels this study to suggest that the prevalent business planning practices are not aligning firms to the changes in the macro environment.

Prior research found that entrepreneurs are challenged by the effects of globalisation, increased competition, and increasingly demanding customers (Vinodh, 2017). Business planning enhances the applicability of any action plan as a transient competitive advantage (Hopp & Greene, 2018). Technological and market changes are evolving and fading away at increased speeds, demanding the entrepreneur's alertness and flexibility in adjusting their business plans (Sirén, Parida, Patel, & Wincent, 2018).

Research shows that poor SME performance is a global challenge (Herath & Mahmood, 2014). Environmental constraints will continually emerge, evolve and revolve, so entrepreneurs must brace to succeed in the perpetual presence of change. Since the small business entrepreneurs are responsible for their venture success, it is important for them to acquire business planning capabilities which resonate with market changes. Entrepreneurs need skills for opportunity identification and exploitation (Su, Xie & Wang, 2015) and good planning to enhance venture performance.

Firm performance measurement varies among firms, who may use any combination of efficiency, sales growth, and profit (Gibson & Cassar, 2005). On the other hand, the government is interested in the growth of SMEs for the greater good of society. SME success will alleviate poverty, inequality and unemployment (Frederick, O'Connor, & Kuratko, 2016). Small businesses are also a source of taxes for the government (GEM, 2017). The business owner gains sustained independence, job replacement, or family upkeep (Carland & Carland, 2003). Academia is concerned with the correlations between business planning and performance and seeks to develop new knowledge on improving the connection between the two constructs (Gibson & Cassar, 2005). Academia hopes for the new knowledge to be taken up by policy to create a conducive macro-economic environment that promotes improved business performance.

2.2 Literature background on BP, EE, and FP

It has been established in prior research that those who plan are better positioned to succeed over those who do not (Bracker, Keats, & Pearson, 1988). Planning clearly states what needs to be done, when, how, why, at what cost, and for how long. Clarity on the course of action before the activity commences helps the entrepreneur to measure the resources at hand against the task ahead. Additional resources can then be sourced if needed. Further research found that those who plan succeed because they allocate resources in response to internal and external changes (Blodgood, 2007). During the activity, changes continue to take place. Changes may be personal to the entrepreneur, or internal organisational deviations. Changes could also be in the external environment. The plan should allow for emergent adjustments to ensure managing the risk of premature failure of the intended course of action.

Brinckmann and Kim (2015) extended the research on planning to perceptions of individuals on business planning, noting that predictions of the future trigger different reactions. Failure to anticipate the future leads to reactive rather than proactive problem-solving. Brinckmann et al (2019) further analysed business planning and found out that its strength depends on the type and quality of education that one possesses. Besides education, experience has a long history of being the best teacher, as entrepreneurs with experience may improve their planning by considering historical successes or disasters. Sudden unexpected catastrophes have the potential to bring business to a standstill.

A good example is the plague epidemic that hit France in 1720, affecting many businesses and leading to many deaths (Biraben, 1968).

It therefore follows that business planning is a product of taught skills (Amadi-Echendu, Philips, Chodokufa, & Visser, 2016). Teaching methods, teaching contexts, and taught content are diverse; the common denominator for quality business planning remains education. Other research findings supported business planning by associating it with its stimulation of organisational excellence which enhances improved firm performance (Carland & Carland, 2003). Organisational performance is therefore directly proportional to the quality of business planning invested by the entrepreneur.

The proponents of business planning have had contenders, who argue that planning interferes with small business entrepreneurs' concentration on daily firm tasks (Carter, Gartner, & Reynolds, 1996). This assertion has been supported in other findings, where firms are said to depend heavily on the entrepreneurs' presence and decision-making (Adams, Harris, & Bohley Martin, 2015). Their heavy involvement in the day-to-day running of the business renders planning an administrative burden that impedes venture practices (Bhide, 2000).

Other researchers disputed the contestations on the basis that there is no opportunity that can be exploited without prior planning (Castrogiovanni, 1996). The planning may be executed without following the processes of recording and revising, as may be preferred. The dangers of undocumented planning, however, are that emergence of threats, opportunities, and business demands will overtake the plans. Further support emphasised that planning is an important precursor to action (Delmar & Shane, 2003).

Other researches pursued the thought that planning behaviours depend on the individuals' human capital, especially education. Basic academic education and entrepreneurial education were identified as catalysts for behaviour that leads to planning for success (Genty, 2019). The inferences that can be drawn from the proponents of education are that literacy develops the human brain to process information better. Furthermore, extant literature associated entrepreneurial education with creation of attitudes of self-reliance (Garavan & O'Cinneide, 1994). Self-reliance then contributes to the entrepreneur's confidence, efficiency, and resilience. Entrepreneurial education also enhances acquisition of social capital from like-minded individuals (Garavan & O'Cinneide, 1994).

In addition to the findings, a Swedish study on the subject posited that EE will have more effective results if it is experiential (Rasmussen & Sorheim, 2006). Combining theory and practice enhances comprehension of taught content and therefore leads to better applicability of theory in the entrepreneurial field (Musetsho & Lethoko, 2017). Since entrepreneurial activity is a practical endeavour, this study supports experiential training.

It was later posited that entrepreneurial education entails development of functional knowledge and skills to build one's character and vision (Gautam & Singh, 2015). A follow-up study attributed to EE the development of behaviours, skills, and attributes that empower individuals to harness change and initiate innovation (Amadi-Echendu, Philips, Chodokufa, & Visser, 2016). This means that EE enhances an individual's propensity for creating emergence strategies as market dynamics unfold. It is this flexibility in planning that sets successful firms apart.

While EE findings were positive in Europe, EE failed to exhibit attributes of behavioural changes in the African context (Ikebuaku & Dinbabo, 2018). The University of South Africa's graduates have largely failed to transfer their academic knowledge into practice (Amadi-Echendu, Philips, Chodokufa, & Visser, 2016). It is this failure to convert theory to practice in South Africa that prompted this study to extend the research on EE. These findings further support the need for experiential entrepreneurial education training.

A gap in literature concerns the fact that while numerous studies have been done from the learner's perspective, nothing has been researched from the educator's perspective (Neck & Corbett, 2018). The lack of proof of the impact of EE on firm performance in South Africa, and Africa at large, may imply that its dispensers are in themselves not entrepreneurial. Empirical studies on the educators may form the basis for future research that will lead to entrepreneurial alumni.

Studies on the effect of business planning on performance exhibit varied findings (Gibson & Cassar, 2005; Carland & Carland, 2003). This is likely due to a lack of consensus on the antecedents of business planning (Davidsson & Garonne, 2016). This emanates from investigating business planning either before, during, or after its implementation. Business planning has been largely indicated as critical to any venture's success, though its value has been queried by others (Davidsson & Garonne, 2016). Planners are better performers than non-planners, as long as their planning is not cosmetic and bent on securing funding (Gibson & Cassar, 2005).

Research has investigated the antecedents, the reasons, and the processes of business planning (Brinckmann & Kim, 2015). However, research is scarce on planning for innovative disruptions in business processes in the African context. Africa is largely a consumer of business models, products/services, and literature from other continents. As such, the continent plays catch-up in terms of its way of running business.

Some literature on business planning emphasises the importance of timing in the business planning process (Wei, Long, & Li, 2018). The timing of business planning in the African context is crucial should SMEs in Gauteng be expected to grow in employment numbers. Entrepreneurs in Gauteng need to use business planning to evaluate present resources, and create new ones, on the basis of predicting future needs (Mansoori & Lackeus, 2018). Such planning capabilities help entrepreneurs to avoid 'me-too' businesses and stay ahead of their competition.

Empirical research shows that small business owners do not invest time and resources into the key aspect of business planning from the outset (Carland & Carland, 2003). Other scholars' results indicate that entrepreneurship education is a proven catalyst for entrepreneurship intentions and performance (Asghar, Gul, Hakkarainen, & Taşdemir, 2019). Without planning, entrepreneurs are not geared towards foreseeing problems and challenges, and as such do not pre-assess their strengths, weaknesses, opportunities, and threats (SWOT). Running into market changes and demands without prior planning leads to reactive rather than proactive problem-solving. While planning comes naturally, in small businesses, the liability of smallness equates the owner to firm decision-making (Gibson & Cassar, 2005). If the owner persists in engaging in conventional and reactive planning, the importance of forecasting becomes trivial and the risk of being overtaken by market changes becomes inevitable.

Contextualising the business planning literature to Sub Saharan Africa will aid a high-growth small business culture. Business planning outlines the entrepreneur's targeted markets, choice of products/services, required resources, and growth expectations to ensure business growth (Hopp & Greene, 2018). The lifespan of a business plan is interrupted by environmental turbulence or by lack of managerial expertise (Carland & Carland, 2003). Lack of quality business planning among the previously oppressed racial groups by the fallen apartheid regime is not surprising (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018; Kumar, 2011). The new democratic government created policy on small

business development to offer financial and non-financial support to SMEs and reconfigured tertiary education to produce entrepreneurial graduates (TIPS, 2017).

Hypothesis

Business planning is a key driver of firm performance in Gauteng.

2.2.1 Strategic business planning

Strategic business planning entails the firm's choice of direction and allocation of resources to ensure attainment of the desired objectives (Wei, Long, & Li, 2018). Running a successful business requires setting out premeditated goals. A business cannot have a destination if one has not been pre-planned for. Wei and Li (2018) ascribe new ventures' firm success to the practice of strategic planning. The goals of an organisation should not be an end in themselves but means to further goals. Strategic planning therefore becomes an ongoing exercise that helps shorten lifespans of competitive advantages before they become unsustainable (D'Aveni, Dagnino, & Smith, 2010). The authors extend their findings to the conclusion that there cannot be a stipulation of the advent of a competitive advantage before the next one kicks in. However, it would be suicidal for a firm to wait until the current advantage is eroded. Strategic planning must have competitive advantages and firm goals overlapping to enhance stability in increasingly unpredictable, uncertain, and dynamic environments.

In one prior study, strategic planning was presented as a regular practice that defines the strategic assets and products for the long-term plans of the firm (Kepczynski, Jandhyala, Sankaran, & Dimofte, 2018). In a world of seismic changes due to increased volatility and uncertainty, long-term planning must be short enough to facilitate the exploitation of transitory opportunities (Leavy, 2014). Small business entrepreneurs' pre-occupation with daily tasks (Adams, Harris, & Bohley Martin, 2015) becomes their limitation to strategically planning for the next wave of opportunities, to the detriment of their own success. Another limitation to strategic business planning for small enterprises is the attainment of the entrepreneurs' basic family needs. When business planning stagnates and stops evolving alongside the life cycle of the firm, a firm is relegated to survival mode.

Prior research had it that planning strategically entails disentangling the uncertainties of the complex world and harnessing the power of the forces at work to one's own advantage (Ridgley, 2012). The strategic thinking school of thought advocates that individuals must have a sharp eye on internal and external blockages and harness them to their success. Internal advantages can be introduced by the hiring of new competent employees to bring new energy, which translates to inimitable heterogeneous resources (Gupta, Tan, Phang, & Ee, 2018). The aim of planning strategically is to develop an edge against competitors and enhance superior performance.

The success of strategic business planning depends on acting from knowledge rather than assumptions or emotions (McGrath, 2013). As knowledge formed the basis of strategy in the battles of the 18th century, where the winners were always a step ahead of the enemy (Ridgley, 2012), so is it for the 21st-century SME if it is to survive and grow. SME owners/managers need to know if their heterogenous possessions can stand the test of time against the external demands. In addition, SMEs need to be aware of the prevailing and forthcoming market expectations and how to execute their plans to the maximum.

For the modern entrepreneur to survive the complex business maze of the 21st century, smart thinking is not an option, but a way of life for SME success (Allen, 2004). Smart thinking entails critical and analytical skills useful for planning for business survival. Accurate identification of threats to products/services and to the relevance of the firm is important. Opportunities need to be identified and the best tactics to execute without failure must be applied. Entrepreneurs must be aware of the internal and external environments, and their competition's plans and strategies, so they can craft competitive strategies. Long-term planning requires that entrepreneurs understand the tactics of the competition (Keller, 2013). They should also appreciate the competitive advantages of the competitors.

It is important to note that the South African market leans toward global brands, customer tastes, and marketing communications (Hill, 2014). This market inclination complicates strategic planning for the SME owners and managers, who are themselves among the followers of the global offerings. It is important for entrepreneurs to think globally and act locally. That calls for entrepreneurs to allocate efforts to improving emergent strategic planning (Mintzberg & Waters, 1985) to cope with and survive seismic changes.

Some prior findings on business planning show significant, but usually weak or moderate effect on firm success (Osiyevskyy, Costa, & Madill, 2016). In the complex world of business, it takes more than planning to ensure firm success. The weak or moderate results testify that the measurement of the impact of business planning as a solo antecedent for firm success, in the absence of other factors, limits exhaustive results. That has led to other research findings contending the value of business planning (Davidsson & Garonne, 2016). Despite the lack of consensus, strategic planning triggers behavioural changes, thereby enhancing a firm's risk-aversion practice (Bachmann, Engelen, & Schwens, 2016). The contribution of business planning remains notable and impactful.

2.2.2 Continuity business planning

Firms need proactive planning on how to save their businesses should events that threaten it take place. Continuity business planning entails the process of enabling ongoing operations and creating preventative measures and recovery plans that deal with unplanned and unanticipated disruptions (Zsidisin, Melnyk, & Ragatz, 2004). Poor planning, or a lack thereof, for managing threats can lead to the folding of a small business (Hambrick & Frederickson, 2001). Risks that threaten small businesses range from natural disasters like floods to man-made threats such as cybercrimes (Cerullo & Cerullo, 2004). Of late, South Africa is experiencing the power challenge of load-shedding (Monyei & Adewumi, 2017). Poor preparation, or the absence thereof, for managing disruptions leads to customer frustrations. Annoyed customers migrate to reliable businesses. Therefore, continuity business planning enhances reliability and customer loyalty.

It is imperative that entrepreneurs plan on how to enhance uninterrupted business activities. Backup plans and alternative product and service delivery options must be on the business plan. The recent and sudden spread of the coronavirus in Wuhan, China, led to a lock-down of the Hubei Province and many other places later, suspending many business activities (Lin, et al., 2020). There have been thousands of deaths and illnesses (Ayittey, Ayittey, Chiwero, Kamasah, & Dzuvor, 2020). While the epidemic negatively affected many businesses, it opened opportunities for others. Businesses with well pre-planned emergent strategies for e-commerce capitalised on the epidemic by switching to online sales platforms (Shen, Shen, & Ye, 2019). Flexibility in distribution channel options, sales channels, and mitigation plans for other disruptions set successful firms

apart from poor performers. The ability to keep the provision of goods and services to consumers uninterrupted increases their loyalty to the firm.

Customers develop loyalty to businesses if they feel that they value them (Keller, 2013). If accessibility of the business' products and services is prone to interruptions, customers move away to other businesses. Continuity of operations, of evolution of processes, and of management enhance market share retention and growth. Success of a firm goes beyond market share and is influenced by the ability to sustain the achieved success through continually planning for the development of unique capabilities (López-Cabarcos, Göttling-Oliveira-Monteiro, & Vázquez-Rodríguez, 2015).

Efforts to ensure business continuity are broad and they go beyond organisational action plans during times of distress. Other forms of continuity planning include security measures to protect the business premises from burglaries, insurance cover for goods and employees, and practising vigilance (Herbane, Elliot, & Swartz, 2004). A great deal of research exists on the role of the entrepreneurs in ensuring the continuity of their business. An external factor that contributes to the business continuity planning is the institutional preparedness of the government and business associations to support businesses threatened by sudden disasters. Small businesses are affected by factors such as management expertise and finances (Barreira, Botha, & Oosthuizen, 2015) to manoeuvre out of sudden distresses. The impact of internal and external threats on the survival of a business can be disastrous, and therefore the importance of capabilities for continuity business planning cannot be overemphasised.

2.3 Entrepreneurial education

Entrepreneurial education as a discipline began with only one course in 1947 at Harvard University (Liguori, et al., 2018). Demand for the discipline has spread globally following the realisation of the importance of entrepreneurship to economic growth. Its curricula design and pedagogical delivery have been refined (Hannon, 2019). The desired outcome of EE is to induce human behavioural changes towards entrepreneurial culture and capabilities (Hannon, 2019). The creation of an entrepreneurial culture leads to the development of national economies. This study acknowledges that entrepreneurial education strengthens the quality of small business performance (Ikebuaku & Dinbabo, 2018).

Entrepreneurial education has many dimensions, but this study only pursues academic entrepreneurial education and experiential entrepreneurial education for practising entrepreneurs. Some research defined entrepreneurial education as a developer of the mindset, skill set and practice that lead to starting a business (Neck & Corbett, 2018). The main thrust of entrepreneurial education is to prime the mind of the graduate to lean towards opportunity identification and execution. Whether the graduates start their own business or serve as employees, their mindset is developed to bring entrepreneurial changes that spur firm growth.

The finding is supported by the fact that EE produces effective entrepreneurs (Asghar, Gul, Hakkarainen, & Taşdemir, 2019). The effectiveness of entrepreneurs comes from the proactiveness entrenched in them as they acquire entrepreneurial education. Other literature further postulates that individuals with entrepreneurial education possess a high planning propensity that influences firm performance (Ikebuaku & Dinbabo, 2018).

Cho and Lee (2018) posit that entrepreneurial education empowers entrepreneurs with knowledge on causes of failure. This prepares them to manage risks. Without entrepreneurial education, SME failure rate increases (Genty, 2019). This skill is supported by the theory of planned behaviour, which acknowledges that performance is improved by entrepreneurial education (Asghar, Gul, & Hakkarainen, & Taşdemir, 2019; Bandura & Adams, 1977). Thus, a business plan-oriented entrepreneur contributes positively to SME performance and aggregate economic growth.

The entrepreneurial education investigated in this study is formal theoretical pedagogy in education about entrepreneurship and education for entrepreneurship (Musetsho & Lethoko, 2017). Education about entrepreneurship is the academic dimension that lays the theoretical foundations of entrepreneurship. Education for entrepreneurship is the training dimension that develops and stimulates an entrepreneurial mindset. Education about entrepreneurship is fit for high schools, while education for entrepreneurship fits tertiary institutions, business incubators and propellers.

Entrepreneurial education aims at enhancing business behaviour in students, graduates, and practising entrepreneurs (Hien & Cho, 2018). One study claimed that the global seismic changes in the market dynamics outpace entrepreneurial education pedagogy (Morris & Liguori, 2016). This poses challenges to the educators and trainers of

entrepreneurial education on effective pedagogical methods and assessments of outcomes. Nonetheless, EE enhances acceleration of starting and growing small businesses.

Hypothesis

Entrepreneurial education is a key driver of firm performance in Gauteng.

2.3.1 Academic entrepreneurial education

Education has had an incremental effect on world literacy levels over the years. Graduates with entrepreneurial knowledge are empowered to participate in business more than those without (Barreira, Botha, & Oosthuizen, 2015). This has been investigated in prior research, and EE was found to be a key antecedent for entrepreneurial competencies (Minai, Raza, Bin Hashim, Zain, & Tariq, 2018). SMEs are the main sources of employment in all countries, and as such, small business is an important profession which demands basic education like any other. Education about entrepreneurship develops different sets of skills at lower levels of education. Hence, pre-tertiary education develops graduates for the employment market (Hernandez-Sanchez, Sanchez-Garcia, & Mayens, 2019). It further lays a foundation for education for entrepreneurship where training is aimed at developing entrepreneurial competencies.

In South Africa, low education and skills, or a complete lack thereof, have been identified as constraints to SME growth (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018). Bhorat et al. (2018) further clarify that 69.2% of the SMME sector is informal and is largely constituted of people with low education. This emphasises the fact that the lower the education, the higher the preponderance of necessity-driven business ventures, and the lower their performance. These revelations are in stark contrast with findings in America and Europe, where EE was first adopted as a discipline and the entrepreneurial capabilities have been refined for over 72 years (Hannon, 2019).

Considering the importance of SME performance in the growth of the economy, the effectiveness of EE needs to be thoroughly assessed in South Africa. Literature on its effectiveness is still scant elsewhere (Hernandez-Sanchez, Sanchez-Garcia, & Mayens, 2019), and in South Africa very little has been researched. Academia has investigated tertiary-level entrepreneurial education more than it has paid attention to the foundation stage of pre-tertiary level (Murray, Crammond, Omeihe, & Scuotto, 2018).

Rigorous studies on how entrepreneurial education nurtures entrepreneurial attitudes are needed in South Africa to create a high entrepreneurship activity culture. Entrepreneurial education must be an integral part of basic education to set foundations for entrepreneurship as a profession, just as other subjects are designed for other professions.

2.3.2 Experiential entrepreneurial training

Barreira, Botha and Oosthuizen (2015) posit that acquisition of entrepreneurial education for the practising entrepreneur is more beneficial in that the entrepreneur knows what and how they want to learn. This assertion is supported by the fact that adult learners are more concerned with skills than with principles (Hannon, 2019). Popular topics sought by the practising entrepreneurs include finances, compensation, sales for growth, and problems that lead to SME failure. Providers of entrepreneurial education need to tailor programmes that are practical and ensure that the assessments are systematic (Barreira, Botha, & Oosthuizen, 2015, p. 57).

Research found that 11% more entrepreneurial education graduates than graduates of other programmes take up business practice as a career (Asghar, Gul, Hakkarainen, & Taşdemir, 2019). This results from the entrepreneurial stimulation motivated by both the theory and the practical part of entrepreneurship education (Piperopoulos & Dimov, 2015). These existing results motivate the training of existing entrepreneurs who are in business following their display of self-confidence. Their self-efficacy can only be strengthened for improved performance. The role of business incubators and propellers in non-financial assistance needs to be reviewed to offer practically oriented training.

Prior research on EE graduates is based on their participation in creating businesses. Research is scant on the contribution of EE graduates that are employed. Therefore, there is no measure of how they contribute to the performance, sustainability, and growth of the businesses they work for. Their contribution in the workplace goes a long way in sustaining the employer who can then employ more people, thus contributing to reduction of unemployment. Such employers make meaningful contribution to economic growth. The government realises meaningful taxes from employers of EE graduates. The government can then further support small and medium businesses. This gap requires empirical research in the South African context.

The conversion of EE youth graduates from employment seekers to employment creators remains lower than desired (Adetola & Minai, 2018), though knowledge acquisition for performance is extensively researched (Murray, Crammond, Omeihe, & Scuotto, 2018). This outcome may explain that although opportunity identification, entrepreneurial intent, and self-efficacy increase, the entrepreneurial ecosystem needs modifications. Research on the South African entrepreneurial ecosystem is mainly critical of the fallen oppressive apartheid regime (Barreira, Dhliwayo, Luiz, & Urban, 2018).

Though marginalisation of previously disadvantaged persons may still exist in subtle ways, there are other barriers like lack of funding in the ecosystem (Bureau for Economic Research, 2016). Besides funding, consumer tastes for exotic goods/services dampen local creativity. This exposes a gap that exists in the EE content and pedagogy. Pedagogy must adopt an inside-out approach in which EE content and context must be designed to stimulate local production that meets global standards. The result will manifest in improved exports over imports. More exports will lead to a healthy trade surplus.

The other gap is in the abandonment of graduates into the field of employment-seeking or venture creation. Training providers should follow up on their graduates to assess their progress. Such an approach will increase the percentage of participation in entrepreneurial activity among graduates with entrepreneurial education over those who do not. As a result, aggregate entrepreneurial activity will contribute to employment creation, social equality, and economic well-being. That will meet the South African vision of reduction of unemployment and poverty by 2030 (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018).

Common pitfalls for entrepreneurs without entrepreneurial education include inefficiencies in financial usage and human resources, limited long-term vision and capabilities in setting strategic goals for innovations in sales processes (Wei, Long, & Li, 2018; Barreira, Botha, & Oosthuizen, 2015). Business and its management were established in the early industrialisation of Europe, and later America, before being exported to other continents and countries (Vizeu, 2011). Though modern industrialisation has blurred the imaginary economic and cultural barriers, EE will further promote common approaches to business. It therefore follows that entrepreneurial education is a remedy to the undesired antecedents for failure.

EE has been known for accelerating business start-ups and enhancing competences (Neck & Corbett, 2018). This study therefore advocates that EE must be administered to

overcome the laissez-faire approach of many SMEs to business demands and market changes (Cho & Lee, 2018). The fact that entrepreneurs with entrepreneurial education plan better than those without cannot be overemphasised. That said, it compels the entrepreneur to realise the importance of EE and the urgency of its acquisition it deserves.

2.4 SME performance

The success of SMEs is measured in many ways, such as profitability, sales growth, longevity, and employment growth (Anderson & Ronteau, 2017). This study focused on sales growth, profitability, and employment growth, to measure firm performance. SMEs' under-performance has disastrous outcomes that may lead to the end of the entrepreneurial venture, strained social relations, and threats to personal health, among other things (Bierwerth, Schwens, Isidor & Kabst, 2015). SMEs should record high sales and profits that offset business and personal expenses so that the firm stabilises, sustains itself, and outgrows the founder/s. Should these metrics not be met, performance is under par. Widespread poor performance of SMEs is catastrophic to the national economic agenda. It is important to investigate what sort of planning small business owners set for themselves and their businesses. Their vision determines their responsiveness to macro and micro market changes, their effort, and their motivation.

The main problem faced by South Africa is sluggish economic growth (SEDA, 2018). This economic slothfulness has seen unemployment rising to 29% by 2019 (SEDA, 2019). Unemployment results from either stagnation or closure of SMEs. Distal problems emanating from SME failures are increased social inequality, high poverty levels, high crime rates, political instability, and brain drain of critical skills to more stable economies (Barreira, Botha, & Oosthuizen, 2015). Considering the intensity of the combined impact of business planning and entrepreneurship education on performance (Carland & Carland, 2003; Asghar, Gul, Hakkarainen, & Taşdemir, 2019), scholars can be persuaded to conclude that SMEs without these key attributes will fail.

Low firm performance exposes the prevailing liability of smallness and inadequacy as it has been proposed that informal business planning is prevalent during periods of growth, and that planning only becomes formal after the growth stage (Gibson & Cassar, 2005). However, the notion that good performance follows good formal planning is disputed by some scholars (Gibson & Cassar, 2005). Nonetheless, this study argues that business

planning explicitly declares the desired goal (vision) and lays out a clear road map (mission) considering possible impediments, complements, substitutes, and opportunities (Bachmann, Engelen, & Schwens, 2016; Brinckmann & Kim, 2015; Davidsson & Garonne, 2016). This study acknowledges business planning as crucial for SME performance (Brinckmann, Dew, Read, & Mayer-Haug, 2019). If business planning is applied to anticipate market changes and equip entrepreneurs accordingly, performance will increase. SMEs need to embrace the expression: 'Blessed are they that learn to plan, for they shall inherit improved performance.'

To reach an amicable firm–government expectations nexus, SMEs need BP skills enhanced by EE that either influence or timeously respond to the ever-increasing market changes. Business planning allows for entrepreneurs' expression of desired courses of action as well as inevitable impending threats. Then they can take appropriate action such as investing, divesting, creating circumvention strategies, re-routing resources, identifying and exploring alternatives, and initiating resource-savings (Raposo & Do Paço, 2011).

2.4.1 Financial performance

Some prior research used liquidity and sales growth as dimensions of financial performance (Vos & Roulston, 2008). Another study ascribed success in firm assets, profit/loss, and market share, as dimensions of financial performance, to human capital (Sardo, Serrasqueiro, & Alves, 2018). A further study supported prior findings by adding the importance of businesses practising efficiency to achieve increased financial rewards (Kristanti, Rahayu, & Isynuwardhana, 2019). Financial growth has become increasingly important to economic growth (Malik, Hayee, & Adeel, 2018).

2.4.1.1 Profitability

Profitability is defined as growth in financial gains after operating expenses are accounted for over a given period (Mlotshwa, 2019). The importance of profitability, according to prior research, is that it accelerates economic growth (Ahl, 2006). This is because profitability is key to the survival of a venture (Sutanto, Sigiols, & Putih, 2018) and to the acceleration of economic growth (Sutanto, Sigiols, & Putih, 2018). Profitability allows for ventures to expand their operations.

SMEs must operate at a profit, which must be ploughed back into the business to enhance venture growth. Necessity-driven entrepreneurs are likely to spend the firm proceeds on family needs, hence stifling the growth of the business. Failure to make a profit, and failure to manage profit, defeats the very definition of an entrepreneur. The making of profit and the use of it are of equal importance. An entrepreneur is motivated to create and manage a business to realise a profit to initiate growth (Carland, Hoy, Boulton, & Carland, 1984).

The benefits of profitability are as follows:

- **Essential for survival**: Earning revenue efficiently leads to gaining more than what is used. The business can then transition from a labour-intensive to a technology-intensive operation, which enhances longevity (Alsyouf, 2007).
- **Increase borrowing power**: Funders and lenders assess the ability of an entity to repay loans based on its profitability.
- **Measure effectiveness of management**: Good or bad management is measured in the difference between what is invested in projects and what is realised in revenue and profits.
- **Attract investors**: Profitable ventures attract investments, which in turn can be used to ramp up the business. Investors see potential of earning dividends with low risk of losing their capital (Antoniou, Lam, & Paudyal, 2007).
- **Peace of mind**: A profitable business helps the business owner to meet their personal life and business expectations, prestige, confidence, and financial freedom.
- **Grow the business' market value**: Profitability is a key metric in the valuation of a business
- **Enhance business operations**: Profitability impacts the business' revenue growth and operational demands, acquisition of assets and equipment, maintenance of equipment, and enables affordability of large projects.
- **Attract quality employees**: Profitability enables that the entrepreneur can meet and improve employees' remuneration and working conditions. Quality prospective employees are attracted to serve in such a business, thus enhancing high-performing organisations, which enables employment and business growth (Froelich, 2004).

- **Tax compliance**: Profits enable firms to fulfil their obligations for government tax, which contributes to economic growth (Jakes, 2018).

Many factors affect the profitability of a business. These include decision-making of the owner/s (Skinner, 1990), firm age, business cycles (Antoniou, Lam, & Paudyal, 2007), economic factors such as recession, exchange rates, and maintenance policy of equipment, to name a few (Alsyouf, 2007).

2.4.1.2 Cashflow

While large businesses can afford to sell on credit terms, small and medium businesses need consistent and well managed cashflow to effectively manage their day-to-day operational needs (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018). Cashflow is the inflow and outflow of cash in a business. Prior research emphasised that management of cash flow determines the liquidity of a business, and liquidity avoids bankruptcy of the firm (Noor, Nour, Musa, & Zorqan, 2012). Funders and lenders use the cash flow statement of a firm to determine the effectiveness of the management. They predict the ability of the business to manage its borrowed funds and the ability to repay them.

Poor cash flow management has been identified in prior research as one of the leading reasons for small business failure (Aren & Sibindi, 2014). Cash flow is poorly managed for several reasons, among which are unnecessary purchases, spending more than the available funds, and poor saving culture. Liability of smallness contributes to SMEs' poor management of their cashflow. They lack advantages of economies of scale and efficiencies which are often enjoyed by large organisations (Bracker, Keats, & Pearson, 1988). SMEs who do not appreciate the implications of funding and the cost of finance are likely to run into constrained cash flow situations (Invernizzi, Menozzi, & Passarani, 2017). Poor planning for resource allocation has been identified as a major contributor to cash flow problems, which has led to SME failure in the first two years (Chimucheka, 2012). Cash flow determines the firm's liquidity, which in turn determines the flexibility of meeting day-to-day financial obligations (Galawe, 2017).

Good cashflow management enhances the functioning of the supply and value chains. Suppliers and distributors get paid for their services in time, which avoids disruptions of supply of goods and services. However, research on the entrepreneurs' endogenous factors that hinder them from practising good cash flow management is still scant in South

Africa (Aren & Sibindi, 2014). Further research in that space will add to the very important literature needed for the South African context.

2.4.2 Non-financial performance

Other than measuring SME performance in financial terms, another key indicator among many is employment growth. There are huge expectations for SMEs to run sustainable businesses which will generate 11 million jobs by 2030 (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018).

2.4.2.1 Employment growth

The persistent unemployment facing South Africa can only be stopped by creating a job-creating rather than job-seeking culture (Musetsho & Lethoko, 2017). Of the unemployment statistics, the most worrying is the rising number who are youth and graduates. Entrepreneurial thinking is of paramount importance in creating ventures that grow in employee numbers (Nicolaides, 2011). Research has not yet synthesised the antecedents of employment growth in SMEs (Janssen, 2012). In that regard, research has so far concluded that the antecedents of firm creation are not necessarily the same or related to those that stimulate employment growth. It however remains that whether individuals enter the entrepreneurial space due to push or pull factors, self-employment and employment of others takes place. The more individuals who create their own ventures, the higher the employment growth.

The facilitation of increased SME participation in the mainstream economy for the main reason of economic growth and employment creation is at the centre of the government's vision (SEDA, 2019). It therefore remains the government's duty to create conducive entrepreneurial eco-systems that enhance increased new venture creation (Kesper, 2000). Conducive environments for entrepreneurship enhance firm profitability and liquidity, which in turn influences firm expansion. The growth of the business demands more employees. Entrepreneurs who fail to make or manage profits will not have business planning that leads to increased employment creation.
Job growth expectations were on the rise between 2015 and 2016, as illustrated in table 1 below.

Table 1: Job growth expectations

Year	2015	2016
Number of jobs	29.8	13.8
1–5 jobs	44.5	*58.7
6 or more jobs	25.7	27.6

Source: GEM, 2017
*Read as 58.7% of early-stage entrepreneurs in 2016 expected to create between 1 and 5 jobs within the next five years

2.5 Conceptual model of the study

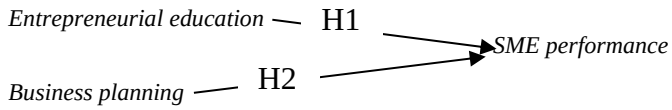


Figure 1: Conceptual model
Source: This conceptual model was highbred from combining Carland & Carland (2003) and Minai, Raza, bin Hashim, Zain, & Tariq (2018)

2.6 Summary of entrepreneurial theories for SME performance

Entrepreneurial education capacitates people's entrepreneurial orientation (Neck & Corbett (2018) and business planning stimulates firm performance (Brinckmann, Dew, Read, & Mayer-Haug, 2019). Neck & Corbett (2018) argue that EE has a direct impact on people's competences hence it positively impacts quality of start-ups, thereby stimulating organisational performance. Brinckmann, Dew, Read, & Mayer-Haug (2019) argue that the antecedents, reasons, and processes of BP determine the impact BP has on driving FP.

Table 2: Summary of entrepreneurial theories

Authors	Focal entrepreneurial phenomenon	Locus of entrepreneurship	Relationship between entrepreneurship phenomenon and strategy
Carland & Carland (2003)	Organisational performance	Individual/organisational members	Business planning stimulates organisational excellence, resulting in increased performance
Davidsson & Garonne (2016)	Organisational performance	Organisational members	Business planning drives firm performance
Brinckmann & Kim (2015)	Organisational performance	Organisation	Antecedents, reasons, and processes of business planning influence firm performance
Brinckmann, Dew, Read, & Mayer-Haug (2019)	Business planning	Business owner/manager	Business planning stimulates performance
Wei, Long, & Li (2018)	Entrepreneurial education	Organisational learning	Entrepreneurial education leads to entrepreneurial performance
Neck & Corbett (2018).	Entrepreneurial orientation	Organisational performance	Entrepreneurial education has direct impact on start-ups and enhancing competencies
Barreira, Botha, & Oosthuizen (2015)	Entrepreneurship curriculum quality	Business graduate's success	An entrepreneurship major as a causal variable for graduate quality

2.7 Summary of the chapter

There is inconsistency on the value of business planning (Carland & Carland, 2003). This results from looking at business planning in silos, that is antecedents, reasons, processes, firm size, and firm age (Brinckmann & Kim, 2015). Though such inconsistencies may impact the definition of firm performance, it remains the case that entrepreneurs are at the core of the phenomena and are key to economic success. Despite the fragmentation of definitions, business planning will positively influence entrepreneurial performance. The SMEs need skills in developing business plans in response to macro and micro environmental changes. Entrepreneurial education catalyses entrepreneurial mindset (Asghar, Gul, Hakkarainen, & Taşdemir, 2019) and enhances how entrepreneurs handle and manage finances and resources, avoid common pitfalls, and improve firm performance (Anderson & Ronteau, 2017; Carland & Carland, 2003).

Extant literature has found significant and positive connections between business planning and firm performance (Bachmann, Engelen, & Schwens, 2016; Bracker & Pearson, 1986; Carland & Carland, 2003). Entrepreneurial education has also proved its worth in contributing to firm performance in developed economies (Barreira, Botha, & Oosthuizen, 2015; Ikebuaku & Dinbabo, 2018). In South Africa low literacy has been widely blamed for inhibiting the creation of formal high-growth SME firms. This is because the stock of knowledge in a firm is determined by the level and type of education received by the owners/managers and employees (Mupani & Chipunza, 2019). Entrepreneurial education enhances accuracy in the interpretation of situations and selection of opportunities, thereby reducing start-up mortality and post-entry continual performance (Muzamhindo & Urban, 2017).

Chapter 3: Research methodology

3.1 Introduction

Research methodology is a way to systematically and theoretically guide a research process (Igwenagu, 2016). The process entails posing a question, collecting data in search of answers to the question, and finally presenting the answer to the question. This section follows research methodology as a structured investigation aimed at solving existing problems in the performance of SMEs. It aims to explore new horizons of knowledge on improved firm performance (Kumar, 2011). In simple terms, research methodology is applied as a set of tools and techniques where a study is an inquiry that seeks to uncover existing and new facts of interest (Walliman, 2011). The study sought to extract data from SMEs in all industries in Gauteng to make a balanced assessment of results. The entrepreneur is the unit of analysis since the success of small businesses heavily relies on their owners. The flow of the sections is meant to articulate the sequence and objectives of the research (Salkind, 2012). The order of the research complies with academic research process (Blumberg, Cooper, & Schindler, 2014). The research sought to understand why some SMEs grow while others either stagnate or fold at a nascent stage or thereafter.

3.2 Research design

The research used a quantitative approach to draw objective inferences from the analysed data. Because of the objectivity of results expected from the study, a positivist paradigm was followed. A positivist paradigm is based on observable and measurable facts which form a basis for valid knowledge (Blumberg, Cooper, & Schindler, 2014). A paradigm is a generally agreed status quo by a research community (Igwenagu, 2016). This research takes a cross-sectional approach to capture a synopsis (Blumberg, Cooper, & Schindler, 2014) of business planning, entrepreneurial education, and SME performance. Conducting the research at a point in time suited the cost and time constrains, as opposed to a longitudinal study which could have been better in that it follows changes in the effects of variables over a period.

The study aims to gather quantitative primary data on business planning (BP) and entrepreneurial education (EE) as the independent variables, and their impact on SME performance as the dependent variable (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018).

The approach employed in this study is deductive, in that it tests existing literature from which hypotheses are drawn. The hypothesised predictor variables are tested for their impact on the outcome variable.

The theoretical backgrounds of predictors pursued in this study are extracted from extant literature and enquired upon to explore room for knowledge expansion. To quantify the existing interconnections as a foundation to quantify the correlations of predictors in the present and future business environment on firm performance, it was best to use a quantitative method. Research design was applied according to the parameters that guide and govern the research process (Salkind, 2012; Blumberg, Cooper, & Schindler, 2014).

3.3 Population and sampling

The population for this study was based on SMEs in various sectors across the Gauteng province. In order to investigate the research within the constraints of time, the sampling frame was determined by the number of employees as the determinant of the firm size. A sampling frame is a list of elements from which a sample is drawn (Blumberg, Cooper, & Schindler, 2014). Various definitions of SMEs were applied to determine the sampling frame.

The common methods of defining SMEs in South Africa according to number of employees are not consistent. SMEs with 5-9 employees are defined as small, 10-49 as medium, and 50 or more as large (Bhorat, Asmal, Lilenstein, & Van Der Zee, 2018). However firm size is also defined according to turnover per sector where the higher the turnover, the higher the employee numbers. From that approach employees can count to more than 500 for the medium enterprises (SEDA, 2019). Prior research is also not consistent with cut off points for firm turnover per firm size. The research instrument categorised firm size according to number of employees (Bureau for Economic Research, 2016) and not financial turnover. Furthermore, and in line with operational definitions of entrepreneurs the SMEs had to be either owners or managers whose businesses has paid salaries consistently since inception. The sample was controlled by gender, designation of participant, owner/manager age, education level, age of venture, and venture employment size.

The Raosoft sample size calculator was used to determine the saturation point of responses for the study. The calculator suggested a sample of 377 participants.

Alternatively, a sample size can be manually calculated. A 5% margin of error and a 95% confidence level are applied in this study. The calculated sample for this study was set at the response distribution of 50%. The sample was chosen for collection of primary data, which is central to testing the hypotheses (Kumar, 2011; Salkind, 2012). The profile of respondents is presented in table 3 below. The sample size of this study is consistent with prior studies' samples of 231 (Carland & Carland, 2003), 294 (Bachmann, Engelen, & Schwens, 2016), and 203 (Invernizzi, Menozzi, & Passarani, 2017). A simple random sampling method without replacement was applied on reachable owners/managers. A self-administered survey was delivered through channels such as Facebook, LinkedIn, paper-based, email, SMS, and WhatsApp. The use of diverse channels was to increase the rate of response by reaching out to individuals that use different technological means.

Table 3: Profile of respondents

Variable	**Description**
Target population	Small business owners in Gauteng
Geographical location	Gauteng, South Africa
Recommended sample size	377
Number of respondents	268

3.4 Measuring instrument

The primary data which was needed from all the variables was gathered using a structured 7-point Likert scale questionnaire to cover all possible responses per item (Salkind, 2012). The questionnaire sought to gather specific data on the entrepreneurs' cognitive assessments of their endogenous capabilities. The aim was to investigate how their capabilities meet the challenges of their business requirements for performance (Herath & Mahmood, 2014). Their motives in expected outcomes such as sales growth, customer loyalty, employee retention, distribution channel requirements, capital and related costs, and labour demand costs were asked.

Where the 7-point Likert scale was not applicable, a minimum of three questions per item was used. The dependent variable (FP) had 11 items since this is where key data was to be collected. The use of multiple indicators to cover a scale leads to an exhaustive and reliable outcome. On the contrary, the use of too few items for a scale poses the risk of losing the scale completely in case of double-loaded or negatively loaded items, or misleading and inconclusive outcomes (Kumar, 2011).

The demographic items were categorical and as such did not require the 7-point Likert scale. The greater the number of questions asked per item, the greater the becomes the reliability of the instrument.

Survey instruments offer the advantages of accessing large samples at the lowest possible cost, with minimal administration (Blumberg, Cooper, & Schindler, 2014). In addition to those advantages, surveys can be distributed through several channels, thereby increasing the potential to reach a broader sample. Another advantage of a survey instrument is the ease with which data can be consolidated and cleaned out for analysis.

To enhance good measurements, a yardstick is needed for a baseline (Blumberg, Cooper, & Schindler, 2014). As such, sales growth per annum and employee ramp-up over a period were used. SMEs are not expected to capture discrete financial data, so sales and profit margins were not investigated.

The instrument was hybridised from extant research that investigated the same variables. Extant scales relevant to this study were adopted, and where necessary, new additional scales were created. Prior researchers from whom some scales were adopted are Barney (2001), Bracker, Keats and Pearson (1988) and Musetsho and Lethoko (2017). Adoption of previously used scales that have already been proven valid and reliable saves time in running a pilot study. If new scales are used without prior testing, they present a risk of negative and/or insignificant data output. Two items were reversed to ensure that respondents apply their minds, as well as to correct for agreement bias. One of the reversed items was from the business planning scale, the other was from the entrepreneurial education scale. They were reversed before data analysis.

Table 4: Measures applied

Construct	Literature sources	Dimensions	Comment on instrument
Business planning Measured on a 7-point Likert scale: 1=Strongly agree, 7=Strongly disagree	Brinckmann, Dew, Read, & Mayer-Haug (2019); Davidsson & Garonne (2016)	Regular planning, proactive planning, benchmarking, assumptions, milestones, operational requirements	Tests the presence and adaptability of the dimensions of business planning in the entrepreneurs and its impact on firm performance
Entrepreneurial education Measured on a 7-point Likert scale: 1=Strongly agree, 7=Strongly disagree	Ikebuaku & Dinbabo (2018); Barreira, Botha, & Oosthuizen (2015); Murray, Crammond, Omeihe, & Scuotto (2018)	Entrepreneurial knowledge, entrepreneurial education, graduates	Tests if entrepreneurs realise the need for acquisition, impact, and benefits of entrepreneurial education on firm performance
Firm performance Measured on a 7-point Likert scale: 1=Strongly agree, 7=Strongly disagree	Herath & Mahmood (2014); GEM (2015)	Cash flow, profits, year-on-year growth, sales volumes, order intake, number of employees, employee retention	Is firm performance influenced by entrepreneurial education and business planning? Is improved financial performance a priority?

			Is employment creation, and growth beyond personal and family employment a concern?

3.5 Data collection

Items under independent and dependent variables were coded mostly on a 7-point Likert scale to enhance data quality and accuracy. The survey questionnaire was distributed manually and through online media channels because most of the entrepreneurs are expected to own or have access to smart gadgets. However, respondents were expected to be either consumed by daily tasks of their ventures, or technologically handicapped such that they might not respond to the survey, interpret it correctly, respond precisely, or treat the survey with urgency (Carland & Carland, 2003, p. 7). South Africa's high failure rate is associated with entrepreneurs who have the lowest levels of education (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018), hence response rate and quality of responses are not expected to be the best.

3.6 Data analysis and interpretation

Primary data was used in this study for its propensity to reflect the sample's perceptions and understanding of their capabilities. Aborted responses were cleaned out from the data before analysis. Frequencies were used to analyse the categorical data while descriptives were used to analyse the metric data. Descriptives sum up key item features needed for final comments (Salkind, 2012) and shows distribution of responses per item. Factor analysis was done to analyse the relationship between items within a scale. Linear regression analysis computed the relationships between independent variables and the impact of independent upon dependent variables (Blumberg, Cooper, & Schindler, 2014). Results of the regression analysis proved the hypotheses. Though the research instrument may have been constructed from previously tested surveys, collected data for the research does not necessarily support the hypotheses put forward. The reason being that the samples differ, the time and geographical locations differ, hence results can differ. The popularly used Statistical Package for the Social Sciences (SPSS) software was used to manipulate, analyse, and present the data (Field, 2013).

3.6.1 Data screening and validation

Data was validated to enhance the quality of analysis that draws valid conclusions. The screening process involved removing invalid entries, missing values, and incomplete

responses. Responses with missing values are unusable, otherwise they would weaken the reliability of the instrument (Blumberg, Cooper, & Schindler, 2014). Poor responses lead to biased or false conclusions, culminating in false recommendations. The eliminated entries posed the risk of causing inaccurate analysis. Some respondents skipped some questions, some abandoned it before completion, and some completed but their firm sizes were outside the scope of the research. After cleaning out the data, 268 valid responses remained for analysis.

a) Missing values

By default, SPSS will exclude data with missing values from the analysis process, hence prior removal will help the researcher to know the quantity of the final valid sample. Missing values compromise the significance of the research results (Salkind, 2012). The survey instrument was populated with easy-to-interpret questions in simple English to avoid respondents getting discouraged due to difficulty in making sense of the questions. Some questions were given a last-option answer of "Other" so the responders would not be forced to select an answer to which they did not subscribe, which might lead to them aborting the survey. Automated reminders were set at weekly intervals for respondents with no or incomplete responses. The survey was also set not to proceed until the question at hand was responded to. This reduced the chances of missing values.

Missing values weaken the alternative hypothesis of an effect to the null hypothesis (Kumar, 2011). Kumar (2011) further states that the other negative effect posed by missing data is the introduction of bias in effect estimates of the mean differences from t-tests, or regression coefficients. The larger the number of missing values, the greater the deviation of the characteristics of the final sample from the original sample and from the population of the study (Field, 2009). Therefore, the more stringent the settings of the survey and the simpler and shorter the questions, the greater the likelihood of avoiding missing values. Field (2009) stresses that the impact of missing data on a sample leads to decreased statistical power and generalisation of results to the broader population.

b) Check for normal distribution

Parametric tests require normal distribution between the dependent variable and each category of the independent variable (Field, 2009). The Kolmogorov-Smirnov and Shapiro-Wilk tests were used to test the normality of the distribution. The Shapiro-Wilk

test has a reputation for producing better statistical power than the Kolmogorov-Smirnov test, whose sensitivity to high values is too great (Kumar, 2011). The test compared the final data used in the analysis to a normal distribution. The closer the distribution is to the diagonal line that represents the independent variable, the more generalisable the data is to the broader population. Histograms provide the easiest form of visual representation of the distribution of data. The distribution is also presented on P-P and Q-Q plots to assist the researcher to make quick observations of the distribution. A numerical table is also generated in SPSS displaying the means and standard deviations of the data distribution.

3.7 Validity and reliability of research

The instrument is proved to be valid if retained factor items are >.4 (Field, 2009). This translates to how sound the research is. Construct validity measures the extent to which variables under a construct are interrelated and the extent to which they reflect some underlying idea (Salkind, 2012). Valid research instruments allow for replication in research, which enhances generation of new knowledge.

3.7.1 External validity

External validity refers to whether the data derived by the study and its output can be generalised to other populations or situations (Blumberg, Cooper, & Schindler, 2014). External validity can be compromised by the different sampling methods, as studies based on participants reachable online risk a bias of excluding those who are not. Other factors such as location of the participants, environmental and infrastructural differences add to the bias of context. Contextual bias poses a challenge of an umbrella data fit.

3.7.2 Internal validity

Internal validity assesses whether the instrument measures what it claims to measure, and if so, then it can be replicated (Blumberg, Cooper, & Schindler, 2014). Internal validity was enhanced by taking measures such as:

• Taking known concepts adopted from previous research, which in this study are business planning, entrepreneurial education, and firm performance.

• Conducting a pilot study to assess the validity of the research instrument.

• Making the items in the research instrument short and simple to avoid ambiguity and difficulties in interpretation.

• Specifying the role of the participant controlled for the relevance of the responses.

3.7.3 Reliability

Reliability measures the internal consistency among items per variable and exposes double-loaded items (Blumberg, Cooper, & Schindler, 2014). Responses to inverse questions are reversed before data analysis to avoid reverse loaded outputs. Cross-loaded data is removed to retain clear factors for data analysis. The Cronbach alpha for the remaining factors should be >.7 to prove that items on the test are consistent with each other in representing their constructs (Salkind, 2012). The greater the Cronbach alpha, the more reliable the factors are. Salkind (2012), however, stresses that reliability does not necessarily translate to validity.

3.8 Correlation analysis

A correlation analysis precedes regression to establish whether there is a linearity between the independent and dependent variables (Salkind, 2012; Field, 2009). The output of correlation analysis appreciates the direction and strength of the linearity between the variables in question. The Pearson correlation coefficient is used to measure the strength of association between two variables with the assumption that they are normally distributed (Field, 2009). Graphical and statistical methods are used in the correlation analysis. The graphical presentation of the outcome is based on a scatter plot along which a pattern of collected data is distributed. Statistical tests produce parametric or non-parametric correlation coefficients. The parametric value of Pearson's correlation coefficient (r) ranges from -1 to 1. A positive correlation indicates an increase or decrease that runs in the same direction between variables, while a negative coefficient indicates an inverse relationship in the increase or decrease (Field, 2009). A two-tailed significance value used in the study evaluates how the variables affect each other. Negative, zero, and positive coefficients indicate negative, non-existent, and strong correlations respectively.

3.9 Regression analysis

Once a significant correlation was established, a linear regression analysis was conducted to predict the dependent variable (outcome) from the two independent variables

(predictors) (Field, 2009; Salkind, 2012). The Pearson correlation coefficient (R) between -1 and 1 is applied in the regression analysis model, just as used in the correlation analysis. The coefficient of determination (R2) measures the predictive capacity of the model, that is the model and data fit, while simultaneously explaining the proportion of variance caused by the outcome variable (Field, 2013). The regression analysis output leads to the interpretation of the data and the determination of whether the data supports the assumed hypotheses.

3.10 Ethical considerations

Institutions of higher learning are guided by codes of ethics, that is principles of conduct that are considered correct, to govern their research (Kumar, 2011). Kumar postulates that ethics relevant in past research may not apply in current settings so there is need for evolving the ethos. At the core of ethics is the protection of the dignity of human beings and animals (Salkind, 2012). Dignity means maintaining people and animals' safety, either physically or psychologically (Salkind, 2012). This study did not include underaged persons because they are not expected to run business, and secondly, they cannot participate without the consent of their parents (Blumberg, Cooper, & Schindler, 2014). This study focused on adults in the 18–60 age range only.

Adults were asked to consent to participation in the survey. This study clearly stated at the beginning a choice between consent and declining to participate. Respondents were not forced or coerced into participating in the study. A promise of confidentiality was made, and that respondents would remain anonymous to protect their privacy and to avoid subjectivity that may occur (Salkind, 2012). Individuals' privacy was not breached or invaded (Salkind, 2012). Anonymity was adhered to such that no data in the research was ever attached to people's names, as recommended by Salkind (2012). The study was mindful of acknowledging all sources or scholars to avoid plagiarism (Blumberg, Cooper, & Schindler, 2014).

3.11 Summary of the chapter

This chapter on research methodology explains the research philosophy and paradigms employed in the study. The study used a quantitative method which adopted a positivist paradigm. The sample consisted of small and medium entrepreneurs or their managers that are based in the Gauteng province of South Africa who voluntarily participated in the

study. Out of a total response of 317 participants, a final usable sample of 218 was retained for data analysis. Data was collected using a self-administered/online questionnaire on how the sample perceives how business planning and entrepreneurial education drive firm performance. Data analysis was conducted for use in interpreting the findings using descriptive analysis, exploratory analysis, correlation analysis, and multiple regression analysis. The outcomes of the data analysis of the independent and dependent variables are presented in detail in chapter 4.

Chapter 4: Presentation of results

4.1 Introduction

In this chapter, the data collected from the survey is analysed according to the methodology presented in chapter 3. The results are reported through explanations and, where necessary, visually using tables and figures. The data reports on the impact of the independent variables on the dependent variable according to the items from the research instrument. The chapter describes and comments on the sample's demographics, namely the ages of the respondents and of the firms, educational levels of individuals, firm size, and firm location. Data reporting includes factor analysis, the research instrument's validity and reliability for replication in future research. The correlation analysis quantifies the association between all the variables, namely independent and dependent variables. Regression analysis assesses the relationship that the dependent outcome has with the independent variables.

4.2 Data screening

The research survey was extended to more than 3 000 contacts via email, Facebook, WhatsApp, LinkedIn, and manually. After numerous attempts and reminders soliciting participants to respond to the survey, a total of 317 participants responded (10.6% response rate). After cleaning out responses with missing values, and those with below 5 employees, a final sample of 268 was retained for analysis. This outcome supports the assumption made in chapter 1 that small business owners are pre-occupied with daily business operations such that they will not likely have time to respond to surveys (Adams, Harris, & Bohley Martin, 2015).

4.3 Sample characteristics

4.3.1 Entrepreneurs' gender

Males dominated the final sample (141) over women (117), comprising 52.6% and 43.7% respectively. Other genders (10) made up the remaining 3.7%. Male domination in business is a global phenomenon (Bosma & Kelley, 2019). Global and South African findings show that males are more inclined to run their own businesses than females.

According a report by GEM, the total entrepreneurial activity (TEA) rate is higher among men than women globally (Bosma & Kelley, 2019).

4.3.2 Education profile

Table 5 below details the educational background of respondents. 14.6% of the sample had grade 12 education or below, while 19.4% had some college and 14.6% were TVET graduates. Males made up 52.6% of the responses while females made up 43.7%, and others made up 3.7%.

Table 5: Level of education

Level of education	No grade 12	Grade 12	Some college	TVET	BTech	Undergraduate degree	Post-grad	Total
Frequency	10	29	52	39	30	41	67	268
%	3.7	10.8	19.4	14.6	11.2	15.3	25	100

4.3.3 Firm size and age

Table 6 below details the sizes and ages of the firms analysed in the study. 75.4% of the firms employ 5–9 people while 24.6% employ 10–49 people. Those with 1–4 (micro) and ≥50 (large) employees were excluded from the final sample to control for the small and medium enterprises only. The new entrants make up 51.9% of the sample, while the 3–4-years-old firms make up 19.4%. The older the firms, the fewer they become. The younger the business, the smaller the number of employees.

Table 6: Firm size

Firm size employees	5–9	10–49	Firm age	1–2 years	3–4 years	5–6 years	7–8 years	9–10 years	11–12 years	13+ years	Total
Frequency	27	17	**Frequency**	139	52	17	18	5	8	29	268
%	17.2	10.8	**%**	51.9	19.4	6.3	6.7	1.9	3.0	10.8	100

4.4 Descriptives

Descriptive statistics, as the term implies, describe the main features of the analysed data and provide summaries about the sample and the measures. The result of descriptive statistics for business planning, entrepreneurial education, and SME performance are presented under this section.

4.4.1 Responses on business planning

The respondents were asked five questions aimed at investigating their level of business planning practice. The results are presented in table 7 below.

Table 7: Scale item frequencies and descriptive for BP

Factor	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree	Mean	SD
BP1: I plan for future business activities, but I do not keep written records.	34	77	25	16	21	72	23	3.82	2.072
BP2: I consistently assess my competition for continual improvements.	90	122	33	4	4	15	0	2.09	1.244
BP3: I plan according to regular assumptions that there are market changes.	68	124	42	13	5	16	0	2.29	1.283
BP4: I regularly plan to improve on requirements for business operations.	80	126	36	13	7	4	2	2.11	1.232
BP5: I constantly plan to improve on current milestones.	91	132	33	5	2	2	0	1.92	.948

132 entrepreneurs agreed that they were highly focused on continuous improvements upon current milestones, and 126 agreed that they pay attention to their competitive environment as a source of motivation for improvements. Non-record keeping was only confirmed by 34, showing that entrepreneurs record their envisaged achievements.

4.4.2 Responses on entrepreneurial education

The respondents were asked five questions aimed at investigating the level of their appreciation of entrepreneurial education. The results are presented in table 8 below.

Table 8: Scale item frequencies and descriptive for EE

Factor	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree	Mean	SD
EE1. Learning about business planning is very important to me.	141	98	15	11	0	1	2	1.66	.940
EE2. I received entrepreneurial education at post-secondary school level.	74	67	22	9	12	67	17	3.32	2.178
EE3. I would prefer to employ graduates who have entrepreneurial education	73	84	43	48	10	10	0	2.51	1.353
EE4. I have not heard about entrepreneurial education	65	107	21	17	21	25	12	2.79	1.809
EE5. Will receiving entrepreneurial education improve your business performance?	113	90	30	27	2	5	1	2.01	1.184

141 respondents expressed that they strongly agree that acquisition of entrepreneurial education is of high importance to them. 113 strongly agreed that they believe attaining entrepreneurial education will have a positive influence on the performance of their business. 74 confirmed that they had received entrepreneurial education. This is consistent with the high response rate of postgraduate entrepreneurs in the study.

4.4.3 Responses on firm performance

Eleven questions were asked to measure the entrepreneurs' level of satisfaction with the performance of their small businesses. The results are presented in table 9 below.

Table 9: Scale item and descriptives for EE

Factor	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree	Mean	SD
FP1. The business has not hired more than 11 employees since it started.	67	62	3	5	3	63	65	3.99	2.519
FP2. There are current employees that have served in the business since it started.	100	91	21	9	4	26	17	2.52	1.897
FP3. The number of employees has grown over the last one year.	44	88	35	14	8	52	27	3.44	2.083
FP4. The business needs to add more employees in the next 12 months.	50	64	40	45	7	37	25	3.40	1.962
FP5. The business expects to employ more than 50 employees in the long run.	56	79	42	22	4	39	26	3.22	2.025
FP6. The business has not grown above 11 employees since it started.	51	58	13	15	7	53	71	4.16	2.413
FP7. The business generates enough cash flow to sustain its operations.	50	123	33	19	10	27	6	2.71	1.617
FP8. Business profits are capable of supporting my personal expenses.	47	111	36	23	11	30	10	2.89	1.723
FP9. The business has experiences year-on-year financial growth.	36	99	39	23	29	35	7	3.16	1.733
FP10. The business has grown its asset base on a year-on-year basis.	42	94	38	18	26	37	13	3.21	1.850
FP11. The business has experienced annual increase in order intake.	31	95	45	22	22	47	6	3.28	1.761

123 and 111 respondents agreed that their small businesses were generating cash flow at level where there was enough profitability to take care of its operations and the expenses of the owner. The strong disagreement of 65 respondents to the statement that they have not hired more than 11 employees since inception, coupled with 100 who agreed that they have retained some pioneer employees, paints a picture of creation of new jobs and retention of the old. The expectations of creating new jobs in the future was represented by 56 and 79, which adds up to a total of 135.

4.5 Normality tests

Statistical errors are common in the analysis of data. The assumption of normality precedes statistical procedures such as correlation, regression, t-test, and variance. The assumption of normality is that the sample used in the study is taken from a normally distributed population (Field, 2013). For samples above 30, parametric procedures can still be carried out without normality tests (Field, 2013). This study applied the Kolmogorov-Smirnov goodness of test (K-S) which tests if the sample is drawn from the same distribution, and the Shapiro-Wilk test which tests that the data came from a normally distributed population. The chosen alpha level was .05 and the outcome of both the Kolmogorov-Smirnov and Shapiro tests were .000 which is below the .05. The null hypothesis that the data came from a normally distributed population was thus rejected. Test of normality figures from the data analysis are presented in table 10 below.

Table 10: Test of normality

		Kolmogorov-Smirnov			Shapiro-Wilk		
Factor item	**Item description**	**Statistic**	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
FP7	The business generates enough cash-flow to sustain its operations.	.314	268	.000	.803	268	.000
FP8	Business profits are capable of supporting my personal expenses.	.286	268	.000	.830	268	.000
FP9	The business has experienced year-on-year financial growth.	.252	268	.000	.870	268	.000
F10	The business has grown its asset base on a year-on-year basis.	.250	268	.000	.865	268	.000
FP11	The business has experienced annual increase in order intake.	.236	268	.000	.866	268	.000

a. Lilliefors significance correction

4.6 Validity

The exploratory factor analysis (EFA) tests the validity of all the items used in the instrument to determine the interconnections between business planning, entrepreneurial education, and firm performance for the SMEs. The objective of the EFA was to determine the underlying structure among variables which explains their correlations (Kumar, 2011). The factors were tested by quantifying their divergence and convergence to confirm the reliability of the existing scales (Salkind, 2012), rather than to create new ones.

The discussion of the data was based only on the factors with high interpretability that make meaningful contribution to the definition of fundamental constructs assumed to underline the variables (Field, 2009). Factors of high interpretability avoid distortion of

the nature of the original variables. Addition of minimal new knowledge enhances the retention of the original variables. The extraction method employed the Principal Axis Factoring (PAF) and the scree plot. Coefficients of less than 0.4 were suppressed. The pattern matrix was used to check if there is no negative or cross loading of factors. The factors that cross-loaded and negatively loaded in the pattern matrix were removed. The final pattern matrix is shown in table 11 below.

Table 11: Pattern matrix

Extraction Method:	Principal Axis Factoring Promax with Kaiser Normalisation. a. Rotation converged in 5 iterations			
Rotation Method:				
Factor	**Item description**	**1**	**2**	**3**
FP (ά = 0.880)				
FP7	The business generates enough cash-flow to sustain its operations	.736		
FP8	Business profits are capable of supporting my personal expenses.	.726		
FP9	The business has experienced year-on-year financial growth.	.937		
FP10	The business has grown its asset base on a year-on-year basis	.870		
FP11	The business has experienced annual increase in order intake.	.709		
BP (ά = 0.812)				
BP2	I consistently assess my competition for continual improvements.		.659	
BP3	I plan according to regular assumptions that there are market changes.		.496	
BP4	I regularly plan to improve on requirements for business operations.		.789	
BP5	I constantly plan to improve on current milestones.		.890	
EE (ά = 0.655)				
EE1	Learning about business planning is very important to me.			.460
EE3	I would prefer to employ graduates who have entrepreneurial education.			.561
EE5	Will receiving entrepreneurial education improve your business performance?			.722

Source: Primary data

4.6.1 Total variance

Table 12 below shows the magnitude of the contribution of each item to the total variance between factors. The cumulative percentage of variance column shows that FP7, FP8, and FP9 account for 66.53% (67%) of the total variance in all the variables. These three items have Eigenvalues that are >1. If we were to reduce the complexity of the data by extracting the three items with Eigenvalues >1 and leave the rest whose Eigenvalues are <1, they would explain 53% of the variability in the original 12 variables. There would be a 14% loss of information.

Table 12: Total variance explained

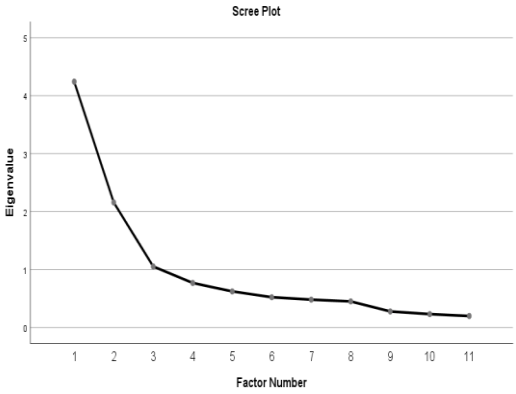
	Initial	Eigenvalues	Extraction sums	Of squared	Loadings
Factor	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
FP7	4.810	40.081	40.081	4.449	37.076	37.076
FP8	1.981	16.508	56.589	1.500	12.504	49.580
FP9	1.193	9.944	66.533	.728	6.068	55.648
FP10	.839	6.990	73.523			
FP11	.648	5.403	78.926			
BP2	.583	4.859	83.785			
BP3	.526	4.382	88.167			
BP4	.464	3.866	92.033			
BP5	.322	2.687	94.720			
EE1	.297	2.476	97.197			
EE3	.196	1.635	98.832			
EE5	.140	1.168	100.000			

4.6.2 The KMO and Bartlett's tests

The KMO test which confirms the adequacy of the sample produced a strong sampling adequacy score (KMO= .818; p>.05) which indicated that there are enough items for each factor and that the sampling was adequate for factor analysis. The minimum acceptable KMO is 0.5. A Bartlett's test of sphericity which tests if the variables are unrelated must produce a value <.001 for variables to suitable for structure detection. The Bartlett test was significant at p=.000 (Approx. Chi Square =1590.551, df=66) as shown in table 13 below. Bartlett's Test of Sphericity's significant p=.000 implied that the factor analysis could be fitted (Field, 2009).

Table 13:KMO and Bartlett's Test

Test		Result
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.818
Bartlett's Test of Sphericity	Approx. Chi-Square	1590.551
	df	66
	Sig.	.000



The scree plot uses Eigenvalues greater than 1 to determine a graphical representation of the FP items three of which explained the 67% of the total variance in all the variables. The items on the shallow slope that have an Eigenvalue below 1 have the remaining 33% of the solution sought by the study (Field, 2013).

Figure 2: Scree plot

4.7 Reliability analysis

Reliability analysis ensures that the scales which were used in the research instrument can be reused and produce consistent results free of measurement errors. The instrument used in this study is reliable for replication because BP and FP factors have Cronbach's alphas of >.8 (Field, 2013) as shown in table 14 below. Field further explained that an $\alpha > .6$ is acceptable in the early stages of a research while $\alpha > .7$ is moderate and the greater the Cronbach alpha, the more reliable the factor. Therefore, all the factors are reliable.

Table 14: Reliability analysis

Composite variables	Cronbach's alpha	Cronbach's alpha	No. of items	Acceptable Cronbach's alpha
Firm performance	.899	.899	5	Good
Business planning	.808	.819	4	Good
Entrepreneurial education	.614	.621	3	Adequate

4.7.1 Reliability of business planning

The Cronbach's Alpha values in table 14 below indicated that there was acceptable reliability for business planning ($\alpha = 0.808$). Since the reliability was adequate, the results further indicate that 80.8% of the variability is in the composite score of four items, which means that 80.8% of variance makes the scale reliable.

Table 15: BP Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.808	.819	4

Table 16 below indicates that if all items had loaded the Cronbach alpha would have improved and deleting an item will decrease the reliability value of the Cronbach alpha.

Table 16: Item Statistics

BP Variable	Mean	Std. Deviation	N
BP2	2.09	1.244	268
BP3	2.29	1.283	268
BP4	2.11	1.132	268
BP5	1.92	.948	268

4.7.2 Reliability of entrepreneurial education

The EE factor's α=.614 in table 17 below from three items is acceptable in the early stages of research or where psychological constructs are investigated according to Field (2013). The Cronbach's Alpha values indicated that there was acceptable reliability entrepreneurial education (α = 0.614). The results confirm adequacy and that 61.4% of the variability is in the composite score of three items.

Table 17: EE Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.614	.621	3

Table 18 below indicates that if all items had loaded the Cronbach alpha would have improved and deleting an item would decrease the reliability value of the Cronbach alpha.

Table 18: Item-Total Statistics

EE Variable	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EE1	4.51	.391	.155	.570
EE3	3.67	.440	.195	.504
EE5	4.17	.464	.216	.452

4.7.3 Reliability of firm performance

The EE factor's α=.899 in table 19 below from five items is acceptable in the early stages of research or where psychological constructs are investigated according to Field (2013). The Cronbach's Alpha values indicated that there was acceptable reliability of firm performance (α = 0.899). The results confirm adequacy and that 89.9% of the variability is in the composite score of five items.

Table 19: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.899	.899	5

Table 20 below indicates that if all items had loaded the Cronbach alpha would have improved and deleting an item would decrease the reliability value of the Cronbach alpha.

Table 20: Item-Total Statistics

FP Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
FP7	12.53	37.299	.701	.536	.887
FP8	12.35	36.437	.690	.524	.889

FP9	12.07	33.537	.858	.776	.852
F10	12.03	33.010	.815	.729	.861
FP11	11.96	36.107	.688	.534	.890

After the validity and reliability of the constructs and scales were confirmed, an aggregate composite score was computed, and correlational analysis was conducted to test the relationships between the factors computed from composite scores.

4.8 Correlation matrix

Correlation tests the degree up to which variables are related. Pearson Correlation tests linearity between each independent and the dependent variable. The Pearson Correlation test can explain the relationships that exist between dichotomous independent variables and a continuous dependent variable (Field, 2009). The Pearson correlation in Table 18 indicates that there is a positive correlation between social capital and business performance.

The data shown in table 21 below shows that BP has a positive and significant (.000) effect on EE, which is weak at r value of .325. There is also a positive and significant (.000) correlation between BP and FP, which is moderate at r value of .488. The moderate relationship of BP to EE is consistent with prior findings (Osiyevskyy, Costa, & Madill, 2016). It was found that EE has a negative (.114) and weak (.031) correlation to FP.

Table 21: Item correlations

		FP	**BP**	**EE**
Pearson correlation	FP	1.000	.488	.114
	BP	.488	1.000	.325
	EE	.114	.325	1.000
Sig. (1-tailed)	FP	.	.000	.031
	BP	.000	.	.000
	EE	.031	.000	.
N	FP	268	268	268
	BP	268	268	268
	EE	268	268	268

4.9 Regression

Linear regression predicts the value of the outcome variables based on the value of the predictor variable (Salkind, 2012).

4.9.1 Regression summary

The combination of the two predictors used in the study explain 24% (R Square .240) of the influence of the IVs on the DV, as shown in table 16 below. The 76% balance of explanation may be due to other factors not covered in this study, or due to some items of the IVs that were not enquired in the study. The ANOVA analysis presented in table 17 below confirms that the regression is significant (.000) and that BP offers 68.9% confidence in contribution to the research questions. EE makes no contribution to the DV.

Table 22: Regression model summary

					Change Statistics				Change Statistics	
Model	**R**	**R square**	**Adjusted R square**	**Std. error of the estimate**	**R square change**	**F change**	**df1**	**df2**	**Sig. F change**	
1	.490a	.240	.234	1.28316	.240	41.860	2	265	.000	2.132

a. Predictor: (Constant), BP
b. Dependent Variable: FP

Table 23: ANOVA

		Sum of squares	**df**	**Mean square**	**F**	**Sig.**
Model	**Regression**	137.844	2	68.922	41.860	.000b
1	**Residual**	436.324	265	1.647		
	Total	574.168	267			

a. Predictor: (Constant), BP
b. Dependent Variable: FP

4.9.2 Hypothesis testing

Table 25 below shows that there is an 80% chance that BP positively drives FP at $\beta = 0.800$, $p > 0.000$. EE has a negative impact of -8.4% on firm performance at $\beta = -.084$ and was insignificant at $p > 0.377$. The results show that the higher the presence of EE, the less the FP. They attest that there is no evidence that an increase in EE leads to an increase in the FP. The correlation matrix supports the outcome by showing that the BP/FP

correlation is significant and moderate, the EE/BP is significant but weak and the EE/FP is not significant and is negative. The support of the hypotheses or lack thereof is shown in table 24 below.

Table 24: Hypotheses

Hypothesis	Statement	Result
H1	Business planning positively drives SME performance	Supported
H2	Entrepreneurial education positively drives firm performance	Not supported

Table 25: Hypothesis testing

		Unstandardised coefficients		Standardised coefficients			95.0% confidence	Interval for B
Model		**B**	**Std. Error**	**Beta**	**t**	**Sig.**	**Lower Bound**	**Upper Bound**
1	(Constant)	1.537	.236		6.509	.000	1.072	2.002
	BP	.800	.090	.504	8.900	.000	.623	.977
	EE	-.084	.094	-.050	-.886	.377	-.270	.102

a. Dependent variable: FP

4.10 Assumptions

The ideal changes in linear regression expect to see a change in one variable corresponding to a change in the other (Field, 2013). The first assumption is that the IV and DV should be measured at a continuous level. Figure 3 below shows strong, more horizontal linearity in which the IVs lead to a moderate increase in the DV. This may suggest that the data needs to be either transformed or a non-linear regression analysis used. Thirdly, the scatter plot shows significant outliers which negatively impact the fit of the regression to predict the outcome (Salkind, 2012). Outliers compromise the accuracy of the results. Fourthly, the scatter plot shows homoscedasticity, which means that variances along the line of best fit remain similar (Field, 2013).

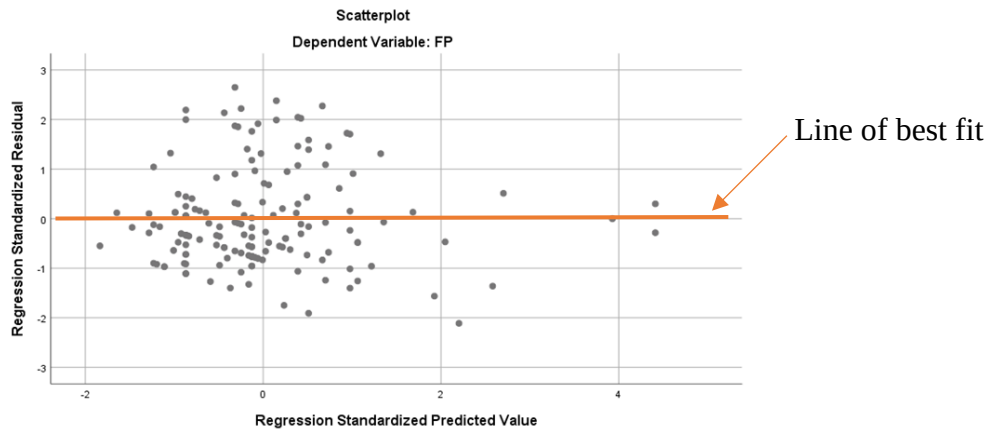


Figure 3: Scatter plot

The final assumption is shown in the Normal Probability Plot (P-P Plot) in figure 4 below graphically identifying that the spread of residuals from linearity is approximately normally distributed.

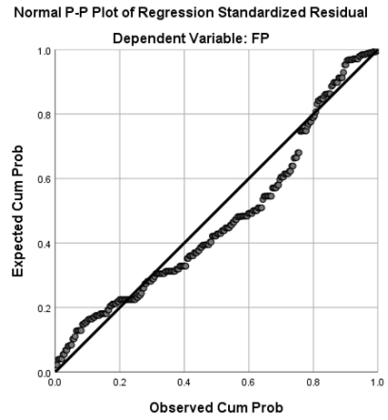


Figure 4: Normal P-P plot for FP

4.11 Summary of chapter

The chapter presents data analysed from a final sample of 268. The sample was dominated by males (141) over females (117). The 31–35 age group had the highest representation with 59 participants (22%). 67 (25%) were postgraduates and 14.6% had the lowest level of education. The bulk of the sample were new entrants in their first or second years of business, representing 51.9%. The highest response of 81 (30.2%) was from the East Rand. The majority of employers had 5–9 employees.

The correlation analysis supported a significant but weak effect of business planning on firm performance. The null hypothesis for the impact of entrepreneurial education on firm

performance was not supported because the correlation analysis showed that it was weak and statistically insignificant.

Correlation helps the researcher to understand the direction, strength, and significance of the factors (Field, 2009). Regression analysis tests if the IV has a relationship with the DV (Salkind, 2012), and in figure 4 only BP is confirmed to have a positive impact on FP while EE has an inverse impact on FP.

Chapter 5: Discussion of the results

5.1 Introduction

This chapter goes into the details of the results presented in chapter 4 to deduce meaning from the data and interpret the hypotheses made in chapter 2. The outcome of chapter 5 is to explore the objective of the study using data to argue the existence or non-existence of the hypothesised impacts of the independent variables upon the dependent variable. The study identified a problem in employment stagnation and retardation in the South African economy (Barreira, Dhliwayo, Luiz, & Urban, 2018). The outstanding leading causes pursued in this study are poor or absent business planning (Brinckmann, Dew, Read, & Mayer-Haug, 2019) and lack of entrepreneurial education in the country (Uleanya & Gamede, 2018). Extant literature is awash with vibrant SME ventures in developed economies, and ascribes good business planning (Bacq & Eddleston, 2018; Bachmann, Engelen, & Schwens, 2016) and entrepreneurial education (Genty, 2019), as pivotal drivers of firm performance.

5.2 Discussion on demographics

5.2.1 Gender

Males dominate business participation globally (Bosma & Kelley, 2019), and that is supported by the data collected in this study in Gauteng. Male participation was 52.6% and that of females was 43.7%, while other genders constituted 3.7%. It is common practice in South Africa that women take care of homes while men work out a living (Urban & Maphalala, 2018). Besides this cultural norm, women were previously disadvantaged in the apartheid era, when their exclusion from the mainstream economy was a policy (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018). The government has in the recent past begun to promote the reversal of the marginalisation of women according to South Africa (2004) as cited by Galawe (2017). The prevalent underrepresentation of women in business remains challenged by the masculine norm that has existed since the early years of industrialisation (Ahl & Marlow, 2012). In addition, women have cultural roles in homemaking.

5.2.2 Entrepreneur age

The 31–35 years old age group dominated the sample (12%). This is consistent with prior findings which found that this age group, who have gained work experience, would have made

some savings and still have manageable responsibilities (Venter, Uban, & Rwigema, 2008). Venter et al. (2008) further postulate that the 18–30 age group would have accumulated neither enough experience nor savings. This age range is hardest hit by unemployment (Matsinhe, 2016). The businesses owned by the 50-54 years age group would operate for 10–15 years before the owners reach 65. The problem of such business life spans is that they lead to erratic employment creation which cannot cope with the rising youth population. Older age groups (above 46 years old) would have raised families and be seeking to retire, but on a positive note, their savings and expertise may inspire them to give back to the community (Venter, Uban, & Rwigema, 2008). There is need for vigorous policy intervention that promotes entrepreneurial participation for both the young and the old, for the former to create their own employment, and for the latter to plough back to the youths in their communities.

5.2.3 Education

Human capital is mainly made up of education, work experience and expertise (Barreira, Botha, & Oosthuizen, 2015). Lack of education and training has been identified as a leading factor in SME failure in South Africa (Chimucheka, 2012). Entrepreneurs with high levels of education and training create feasible business plans and implement the plans to enhance firm performance (Amadi-Echendu, Philips, Chodokufa, & Visser, 2016). The number of respondents with high educational levels who responded to the survey was 65 (25% of the sample). This, however, did not translate into an inference that EE has an impact on FP; hence, the regression analysis did not support the hypothesis for the EE/FP interconnection. While extant literature confirms that EE has changed the business climate in developed countries (Cho & Lee, 2018; Welsh & Drăguşin, 2011), African literature continues to lament that EE remains a key missing link in successful SME participation (Ikebuaku & Dinbabo, 2018; Uleanya & Gamede, 2018; Preisendorfer, Bitz, & Bezuidenhout, 2012).

Funders base qualification for funding on credit records and not on the quality of the business plan (Chimucheka, 2012). They are therefore defeating the small business owners' realisation of the need to acquire EE, which enhances BP skills. Those aged above 50 years lag in the prevailing technological demands of business; hence, their businesses are most likely to be necessity-driven and non-innovative (Barreira, Dhliwayo, Luiz, & Urban, 2018). Their businesses quickly reach decline stages. If there is no succession planning, such businesses gradually stop operating, or die with the owner (Mupani & Chipunza, 2019).

5.2.4 Firm size

The firms employing between 5 and 9 employees made up 75.4%, while those employing 10–49 and more made up 24.6%. The results attest that there is a little propensity to plan for and succeed at growing. Though entrepreneurs with postgraduate education dominated the sample, the low employment numbers are consistent with prior research. Prior research found that graduates from the University of South Africa have challenges in transferring their academic knowledge into practice (Amadi-Echendu, Philips, Chodokufa, & Visser, 2016). The prevalence of low small firms' performance is consistent with the findings that most small entrepreneurs lean more towards self-employment (Sautet, 2013). Sautet (2013) further elaborates that measures for self-employment are not the same as measures for entrepreneurship.

5.2.5 Firm age

Most firm activities in the sample are in ventures that are 1–2 years old. Research has it that most failures manifest within two years (Urban, 2013). The firms that are 9–10 years old are significantly few, in this case 5, while those that are 11–12 years old are 8. Though the firms that are 9 years old and older are more stable, their total number of employees remains below 50. This means that most SMEs start and end small. This is supported by prior research (Beder, Oosthuizen, Reddy, & Venter, 2017). Low literacy and poor business planning have been identified as drivers of sluggish firm growth (Chimucheka, 2012). These constraints echo a different study based on the South African context (Gomera, Chinyamurindi, & Mishi, 2018). There is need for macro policy that stimulates SME participation through subsidies and other incentives to enhance survival and growth.

5.3 Discussion on hypotheses

Two hypotheses make up the boundaries of the discussions in this study. The study departs at the assumptions that SME performance in South Africa, especially in the economic hub of Gauteng, is below the expectations of employment creation. The root causes of poor SME performance (FP) under investigation in this study are poor or absent BP and EE.

5.3.1 Discussion on business planning

Hypothesis 1: Business planning is a key driver of firm performance in Gauteng Province of South Africa.

The data analysis supported the significance of the hypothesis, though the impact was found to be weak. The questions asked enquired on the prevalence of planning, record keeping, revision of plans according to market changes, and continual business improvements. The study acknowledges that the weakness of the BP variable confirms that the SME's primary goal is to meet family needs. Such a goal determines some level of business planning, hence if family achievements are met, SME failure is defied in that regard (Aeeni, Motavaseli, Sakhdari, & Dehkordi, 2019). However, SME success at family level may not necessarily translate to economic growth. Prior research elaborated that those who plan outperform those who do not (Brinckmann, Dew, Read, & Mayer-Haug, 2019).

The weak BP/FP correlation therefore shows why SMEs in Gauteng are not meeting the expectations of curbing the rising unemployment. In a study done by Osiyevskyy, Costa, and Madill, (2016) business planning significantly positively predicted the firm's financial performance with respect to consistent cash flows only, though significantly but weak prediction of reaching profit target and revenue growth. Overall the impact of BP on FP was significant but weak. Such a result resembles this study's outcome.

Business planning for growth has been postulated to come from education, specifically entrepreneurial education (Barreira, Botha, & Oosthuizen, 2015; Radebe, 2019). Education is an integral component of human capital.

Firms operate in environments that experience seismic changes; hence, they need transient business planning (Davidsson & Garonne, 2016). The quality of business planning is derived from high literacy, and especially EE literacy (Brinckmann, Dew, Read, & Mayer-Haug, 2019). The weakness of the BP/FP correlation confirms the lack of quality human capital (education, experience, and expertise) among the small business owners (Barreira, Dhliwayo, Luiz, & Urban, 2018). Results from prior research by Brinckmann, Dew, Read, and Mayer-Haug, (2019) and this study suggest that individuals need some level of EE in order to change their disposition towards BP. Larsen, Lindhard, Brunoe, and Jensen (2018) came up with results that support that the practice of business planning enhances efficiencies which in turn improve

financial performance of the firms. Without strong human capital, the businesses will largely be stuck in the necessity-driven phase, which focuses on meeting family needs.

5.3.2 Discussion on entrepreneurial education

Hypothesis 2: Entrepreneurial education is a key driver of firm performance in Gauteng Province of South Africa.

Five items covering the entrepreneurs' possession of EE, perception on the importance of learning, employing EE graduates and their perception of the influence of EE on FP were asked. Data confirmed the validity and reliability of the items and that an insignificant but negative interconnection between EE and FP exists. It didn't therefore support the hypothesis that improvement in EE positively enhances changes in firm performance. Findings in prior South African research concluded that absence of EE in the educational curriculum inhibits participation and success in entrepreneurship (Radebe, 2019; Uleanya & Gamede, 2018). Raposo and do Paço (2011) concluded that EE impacts people's attitudes, skills, and competences which positively contributes to improved entrepreneurial performance. It can be argued therefore that lack of skill, competence, and attitude development inhibits SME performance. The results of this study therefore expose the underlying reason for the poor SME performance in Gauteng province. The perceptions of the sample on entrepreneurial education testify to how scant EE is in South Africa. This outcome is supported by recent research on UNISA graduates' failure to transfer theory to practice (Amadi-Echendu, Philips, Chodokufa, & Visser, 2016).

In other extant literature, it was found that those with EE have high entrepreneurial intentions, and once in business they perform better than those without (Ikebuaku & Dinbabo, 2018). Those who plan have high literacy levels (Beder, Oosthuizen, Reddy, & Venter, 2017; Barreira, Botha, & Oosthuizen, 2015; Barreira, Dhliwayo, Luiz, & Urban, 2018). Those who plan also perform better than those who do not (Carland & Carland, 2003; Brinckmann & Kim, 2015; Brinckmann, Dew, Read, & Mayer-Haug, 2019). Like this report's findings, are the findings of Cho and Lee (2018) which produced no connection between EE and FP. Their results explained the prevalent youth unemployment in South Korea. The similarity of the South Korean economic quagmire and that of South Africa is further proof that absence of EE explains the persistence of poor firm performance. Therefore, the central role that EE plays in improving the quality of BP cannot be overemphasised in the South African context. The

argument for the need for EE is therefore strengthened and the prevailing state of EE's absence is visible in the rejection of the EE/FP hypothesis.

5.4 Summary of chapter

SME performance in South Africa remains low, and as such, unemployment escalates annually (GEM, 2017). High unemployment creates fertile grounds for the escalation of social ills such as inequality, poverty, and crime (Beder, Oosthuizen, Reddy, & Venter, 2017). There are also strong tendencies towards dependency on government to provide jobs, housing, and social grants, which hinders the urge to acquire education and intensive business planning skills (Beder, Oosthuizen, Reddy, & Venter, 2017). There is a need to entrench entrepreneurial intent through rigorous entrepreneurial education (Ikebuaku & Dinbabo, 2018) to divert the current perceptions of especially the youth and women (Ahl, 2006; Preisendorfer, Bitz, & Bezuidenhout, 2012).

Underperforming SMEs in South Africa's Gauteng province dampen economic growth (SEDA, 2018; Gomera, Chinyamurindi, & Mishi, 2018; Barreira, Botha, & Oosthuizen, 2015). SME/government employment rates in Africa are the opposite of the successful rates of America and Europe (GEM, 2015).

This study realised that the hope for improving economic development in Gauteng and South Africa at large is still far from becoming a reality. The status quo of retardation of employment will continue (SEDA, 2018; Gomera, Chinyamurindi, & Mishi, 2018; Barreira, Botha, & Oosthuizen, 2015). It can only be arrested through the creation of successful small businesses (Herath & Mahmood, 2014). The success of SMEs will depend on the quality of business planning capabilities (Gomera, Chinyamurindi, & Mishi, 2018). Investments in entrepreneurial education will add value to the quality of many attributes that enhance entrepreneurial performance.

Business planning will avert uncertainties caused by environmental constraints (Schmitt, Rosing, Zhang, & Leatherbee, 2017) and will enhance identification and exploitation of transient opportunities and competitive advantages (Hopp & Greene, 2018). Other research agrees that BP creates a clear road map for the owner's entrepreneurial journey (Brinckmann & Kim, 2015). In another finding, the absence of planning is said to leave success to chance (Larsen, Lindhard, Brunoe, & Jensen, 2018).

Entrepreneurial education, which in this study failed to support the hypothesis of its effect on FP, remains a key missing ingredient in the development of entrepreneurial capabilities (Hien & Cho, 2018). Acquisition of EE and BP skills empowers the entrepreneur with unique resources that will position the firm for success (Alvarez & Busenitz, 2001; Barney, 2001). SME sustainability and growth advances the government's vision of equality, the eradication of poverty, and a literate population by 2030 (Bhorat, Asmal, Lilenstein, & Van der Zee, 2018).

Chapter 6: Conclusion, implications, and recommendations

6.1 Introduction

This chapter draws the study to a close by discussing the significance of the study results. It aims to discuss the theoretical and practical implications of outcomes of the study. The implications entail the contribution to knowledge, to practice, and to policy. Suggestions are made on possible recommendations for future research.

The study investigated how business planning and entrepreneurial education relate to SME firm performance in the field of entrepreneurship. Entrepreneurship encompasses the identification and exploitation of opportunities and requires skill in re-combining resources to produce value-adding products/services (Wei, Long, & Li, 2018; Barreira, Dhliwayo, Luiz, & Urban, 2018; Aeeni, Motavaseli, Sakhdari, & Dehkordi, 2019).

6.2 Conclusion of the study

The outcomes of the study confirmed a significant and moderate impact of business planning on firm performance. The impact that entrepreneurial education has on firm performance was not supported and statistically insignificant. Business planning is a crucial organisational strength, that cannot be left to chance in a world where globalisation has opened markets everywhere to everyone and competition from everywhere anyhow (Hill, 2014). The presence and impact of global opportunities and threats respectively can form firm foundations for growth for SMEs who plan well (Cho & Lee, 2018). Therefore, conscious acquisition of business planning skills is needed to create competitive advantages regardless of the size or age of a business (Larsen, Lindhard, Brunoe, & Jensen, 2018, Osiyevskyy, Costa, & Madill, 2016; Brinckmann & Kim, 2015).

The failure of data to support the hypothesis for entrepreneurial education explains its infancy and insufficiency in the South African context. It therefore persuades small business owners to acquire entrepreneurial education or employ graduates with entrepreneurial education to enhance business planning skills that lead to sustainable business processes and offerings. EE stimulates entrepreneurial expertise, which will immensely contribute to the absorption of the unemployed, improved livelihoods, and social equality (Carland & Carland, 2003; Barney, 2001; Barreira, Dhliwayo, Luiz, & Urban, 2018).

6.2.1 Hypothesis 1: Business planning is a key driver of firm performance in Gauteng Province of South Africa.

Hypothesis 1 was supported and statistically significant. In further support for hypothesis 1, this study acknowledges that planning is a behavioural output, and a blanket prediction on its antecedents and outcomes for a multi-cultural society like that of South Africa cannot be accurate. As such, an umbrella prescription of BP as an antecedent for firm performance cannot be warranted. However, formal BP practices will meaningfully contribute to a paradigm shift from necessity-driven to innovation-driven entrepreneurship (Barreira, Botha, & Oosthuizen, 2015), which will result in increased employment creation. The outcome of this study supports studies done by Ploegmakers, Beckers, and Krabben (2018) which suggested that proactivity and targeted planning interventions have a positive impact on firm performance. Similar findings were previously found by Jackson and Watkins (2007). However, Lester, (2013) argued that it is not only the planning activity that matters but the nature and purpose of the business, reliance on accurate information on the business sector and timing that contributes to the impact of business planning on performance.

6.2.2 Hypothesis 2: Entrepreneurial education is a key driver of firm performance in Gauteng Province of South Africa.

Hypothesis 2 was not supported and statistically insignificant. The study acknowledges the discrepancy of the EE's effect on FP but agrees with other findings that students with high awareness and orientation to entrepreneurship are far better placed to succeed in business (Leibowitz & Bozalek, 2014). The findings of a prior study asserted that the absence of EE stifles entrepreneurial performance (Welsh & Drăguşin, 2011). The same is believed by prior research for South Africa (Urban, 2013). As such, a paradigm shift from industrial to entrepreneurial economies has been put forward (Cho & Lee, 2018). Cho and Lee (2018) found that EE leads to a culture that promotes creation of more businesses and not necessarily creation of more entrepreneurs. An entrepreneurial culture can only be fostered by governmental macro policies (Uleanya & Gamede, 2018).

6.3 Implications and recommendations

Prior studies investigated the impact of BP on FP separately, while others investigated the EE to FP connection separately. This study sought to investigate both EE and BP and their combined impact on driving small business performance. This study pursues the two

antecedents for firm performance as a worthy endeavour in the contribution to knowledge. It is imperative for entrepreneurs to realise the importance of business planning to the success of their ventures (Wei, Long, & Li, 2018). Other research supports this by highlighting the threats of customer demands due to increased awareness (Vinodh, 2017). Wei and Li (2018) further posit that the practice of business planning avoids costs caused by trial-and-error learning.

This study hypothesised that business planning is key to the success of a firm. Without a plan, victory is not guaranteed; as said by Sun Tzu: wars by great generals are won before the battle (Giles, 2000). Success is planned out before business execution, and continuous improvements on the planning will ensure further success.

The absence of entrepreneurial education retards the much-needed inception, running, and establishing of advanced business processes as major contributors to firm performance. Introducing entrepreneurial education in high schools and higher education institutions will enhance general business knowledge (Musetsho & Lethoko, 2017). This is supported by other recent research (Ikebuaku & Dinbabo, 2018). Its introduction at tertiary and post-tertiary level enhances entrepreneurial competency, awareness, and creativity in entrepreneurial processes (Wang, Chang, & Li, 2018). More studies from China support the findings (Wei, Long, & Li, 2018). Such attributes positively influence the entrepreneur's capability to perform intensely, and effectively. Literature on entrepreneurial education and its correlation with business planning in the South African context is young and scant, and therefore the sample responses rejected the hypothesis.

6.4 Limitations of the study and suggestions for further research

Thus far, this study has made efforts to elaborate on the importance of business planning and entrepreneurial education to the attainment of firm performance. There are, however, limitations that lay foundations for future studies. Firstly, there is a lack of congruence in defining firm performance, as has been mentioned in prior research findings (Davidsson & Garonne, 2016). Firm performance has been measured in terms of financial proceeds, employee numbers, profitability, efficiencies, and longevity (Anderson & Ronteau, 2017). This study only used financial performance and employment growth to measure firm performance. These fragmentations pose challenges for academia to arrive at a common agreement of how to measure the performance of a firm. However, the same fragmentations offer wide room for further research on how to link success to an all-inclusive pool of antecedents.

Secondly, sample data was only collected in Gauteng, and at a low response rate. The sample size and location limits generalisation of results to the whole country. Future research can therefore employ a greater sample size of entrepreneurs drawn from all provinces to enhance broad applicability of findings. Expansion of the sample to encompass the entrepreneurs, the government, and academia will triangulate the unique contributions of each sector to firm performance.

Thirdly, the demographic data was not applied to test its impact on SME performance, apart from simply allocating its distribution. There are studies that have found that feminism has culturally disadvantaged women against their male counterparts (Ahl & Marlow, 2012). Further studies can explore how age, educational background, political affiliations, and other contexts influence individuals' contribution to firm performance.

Fourthly, the study investigated how entrepreneurs plan for the present and future desired states of their enterprises, without investigating their present stages of personal needs. Levels of personal needs play a major role in allocation of energy and time according to Maslow's hierarchy of needs (Adams, Harris, & Bohley Martin, 2015). Future research can investigate how Maslow's hierarchy of needs impacts the range and scope of planning. Furthermore, the study investigated the entrepreneurs' perceptions on the contribution of entrepreneurial education to firm performance without enquiring about its content and context. This leaves room for further research on the curriculum of EE and pedagogical preferences that enhance EE quality that enhances firm performance.

Lastly, a cross-sectional study is a limitation since it does not investigate the journey taken by entrepreneurs in their acquisition of the human capital that capacitates them to meet firm performance expectations. Future studies based on longitudinal designs will capture the transition of changes in the DV as the IV changes over time. Longitudinal studies also enhance response rates because the researcher has time to contact a wider pool of respondents and has time to follow up.

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Appendices

Appendix 1: Consistance matrix

Table 26: Consistance matrix

Business planning and entrepreneurial education: Key drivers for SME performance in South Africa's Gauteng province							
Sub-problem/aims	**Literature review**	**Hypotheses or propositions**	**Research questions**	**Variables (independent & dependent)**	**Source of data**	**Type of data**	**Analysis**
To investigate the impact of BP on FG	Bracker & Pearson (1986); Gibson & Cassar (2005); GEM (2015); Wei, Long & Li (2018); Schmitt, Rosing, Zhang, & Leatherbee (2017).	BP positively drives with firm performance	To what extent does BP positively impact FG?	IV1=BP	Qn: 4.1–4.5	ordinal	Descriptive analysis Correlational analysis
				DV1=FP	Qn: 3.1–3.11		
To investigate the effect of EE on FP	Hien & Cho (2018); Murray, Crammond, Omeihe, & Scuotto (2018)	EE has a positive impact on FP	What is the effect of EE on FP?	IV2=EE DV1=FP	Qn: 7.1–7.3 Qn: 5.1–5.5 Qn: 3.1–3.11	ordinal	Regression analysis Descriptive analysis Correlational analysis
IV: Independent variable							
DV: Dependent variable							

Appendix 2: Research instrument

2.1 Letter of introduction

Q1.1 WITS BUSINESS SCHOOL

This survey is a requirement for the partial fulfilment of a Masters in Management in Entrepreneurship and New Venture Creation (MMENVC) for Trustlord Marecha (1142372@students.wits.ac.za). We are interested in understanding the validity and reliability of the following scales: Business Planning, Entrepreneurial education, SME performance (Employment and Financial Growth). You will be presented with information relevant to the four scales and asked to answer some questions. Please be assured that your responses will be kept completely confidential.

The survey should take you about **10 minutes** to complete. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any prejudice. If you would like to contact the supervisor/lecturer in the study to discuss this research, please e-mail Dr Murimbika at mcedward.murimbika@wits.ac.za

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age or older, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason. Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

- ○ I consent (1)
- ○ I do not consent (2)

2.2 Survey questionnaire

Q1.2 Are you an individual who is currently an owner/manager of an established business that has paid salaries, wages, or any other payments to the owners and employees consistently since inception?

- ○ Yes (1)

- ○ No (2)

Q2.1 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Other (3)

Q2.2 What is your age?

- ○ 18-24 (1)
- ○ 25-30 (2)
- ○ 31-35 (3)
- ○ 36-40 (4)
- ○ 41-45 (5)
- ○ 46-50 (6)
- ○ 51-60 (7)

Q2.3 What is your level of education?

- ○ Less than grade 12 (1)
- ○ Grade 12 (2)
- ○ Some college (3)
- ○ TVET college (4)
- ○ BTech degree (5)
- ○ Undergraduate degree (6)
- ○ Post graduate degree (7)

Q2.4 What is the size of your business?

- ○ 1-4 employees (1)
- ○ 5-9 employees (2)
- ○ 10-49 employees (3)
- ○ 50+ employees (4)

Q2.5 What is the age of your business?

- 1-2 years (1)
- 3-4 years (2)
- 5-6 years (3)
- 7-8 years (4)
- 9 -10 years (5)
- 11 -12 years (6)
- 13+ years (7)

Q2.6 In which part of Gauteng is your business based?

- East Rand (1)
- Johannesburg Central (2)
- West Rand (3)
- Pretoria North (4)
- Pretoria East (5)
- Pretoria West (6)
- Other Gauteng area (7)

Start of Block: Firm Performance

Q3.1 The business has not hired more than 11 employees since it started.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q3.2 There are current employees that have served in the business since it started.

- Strongly agree (1)

- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q3.3 The number of employees has grown over the last one year.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q3.4 The business needs to add more employees in the next 12 months.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q3.5 The business expects to employ more than 50 employees in the long run.

- Strongly agree (1)

- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q3.6 The business has not grown above 11 employees since it started.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q3.7 The business generates enough cash-flow to sustain its operations.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q3.8 Business profits are capable of supporting my personal expenses.

- Strongly agree (1)

- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q3.9 The business has experienced year-on-year financial growth.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q3.10 The business has grown its asset base on a year-on-year basis.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q3.11 The business has experienced annual increase in order intake.

- Strongly agree (1)

- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

End of Block: Firm Performance

Start of Block: Business planning

Q4.1 I plan for future business activities but I do not keep written records.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q4.2 I consistently assess my competition for continual improvements.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q4.3 I plan according to regular assumptions that there are market changes.

- Strongly agree (1)

- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q4.4 I regularly plan to improve on requirements for business operations.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q4.5 I constantly plan to improve on current milestones.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

End of Block: Business planning

Start of Block: Entrepreneurial Education

Q5.1 Learning about business planning is very important to me.

- Strongly agree (1)

- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q5.2 I received entrepreneurial education at post-secondary school level.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q5.3 I would prefer to employ graduates who have entrepreneurial education.

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q5.4 I have not heard about entrepreneurial education.

- Strongly agree (1)

- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

Q5.5 Will receiving entrepreneurial education improve your business performance?

- Strongly agree (1)
- Agree (2)
- Somewhat agree (3)
- Neither agree nor disagree (4)
- Somewhat disagree (5)
- Disagree (6)
- Strongly disagree (7)

End of Block: Entrepreneurial Education

Appendix 3: Research report approval letter

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Private Bag 3 Wits, 2050
Fax: 0270865535224
Tel: 02711 7173582

Reference: Ms Jennifer Mgolodela
E-mail: jennifer.mgolodela@wits.ac.za

15 January 2020
Person No: 1142372
TAA

Mr T Marecha
3 Frip Corner
3 Willow Road
Eastleigh
Edenvale
1609
South Africa

Dear Mr Trustlord Marecha

Master of Management in Entrepreneurship and New Venture Creation: Change of title of research

I am pleased to inform you that the following change in the title of your Research Report for the degree of **Master of Management in Entrepreneurship and New Venture Creation** has been approved:

From:	**Business planning and entrepreneurial education: key drivers for SME performance in South Africa**
To:	**Business planning and entrepreneurial education: key drivers for SME performance in South Africa¿s Gauteng province**

Yours sincerely

Mrs Marike Bosman
Faculty Registrar
Faculty of Commerce, Law and Management

Appendix 4: Ethical clearance letter

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg

Wits Business School

Wits Business School Ethics Committee
Constituted under the University Human Research Ethics Committee (Non-Medical)

Ethics Clearance Certificate

Ethics protocol number: WBS/BA1142372/712
This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below)

Project title	Business planning and entrepreneurial education: Integrating key drivers for SME performance in South Africa's Gauteng Province
Investigator / Researcher	Mr Trustlord Marecha
Nature of Project	MM (Entrepr & New Venture Creation)
Decision of the Committee	Approved unconditionally
Issue Date of Certificate	2019/11/19
Expiry date	Date of submission of the project report
Chairperson	Prof Anthony Stacey ☎ +27 11 717 3587 +27 82 880 4531 ✉ anthony.stacey@wits.ac.za

Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.

Signature

22-11-2019
Date: