



Private activities and business success of South African business owners

Mandira Soomeer

873379

**A research article 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 Business Administration**

Johannesburg, 2018

Protocol number: WBS/BA/873379/819

DECLARATION

I, Mandira Soomeer, declare that this research article is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Mandira Soomeer

Signed at Johannesburg

On the 6th day of November 2018

ACKNOWLEDGEMENTS

Firstly, I would like to thank my supervisor for the support and guidance which she provided. This has greatly contributed to the quality and direction of the study.

Secondly, my gratitude and appreciation go to the entrepreneurs who assisted me with the construction of my research survey, as well as the respondents who took the time to complete my research survey. Without such data there would be no study.

Lastly, I would like to thank my family and friends for their support during this journey. It was not an easy one and their encouragement and advice kept me grounded.

SUPPLEMENTARY INFORMATION

Nominated journal:	The Southern African Journal of Entrepreneurship and Small Business Management
Supervisor:	Mpho Ravele
Word count [†] :	14 478 words
Supplementary files:	N/A

ABSTRACT

Entrepreneurship in South Africa is of growing importance, given the climate of high unemployment and negligible economic growth. Engagement in entrepreneurship, provides an opportunity for job creation, creating a self-reliant society. However entrepreneurial endeavours face significant challenges in resource shortages, particularly within the fledgling years, that can compromise and affect the longevity of the business.

The objective of the study was twofold. Firstly, the activities that South African entrepreneurs engage in within their personal capacity, was evaluated to understand if these could be summarised into key themes of factors. Secondly, the factors were assessed to identify which are important in determining entrepreneurial success, as defined in the context of sales growth, number of years in operation and growth in workforce.

The study is cross-sectional and quantitative in nature. Primary data, from a sample of 136 entrepreneurs, was collected through self-administered surveys. Data analysis included factor analysis and multiple linear regression analysis. The results have revealed that entrepreneurial success is largely driven by the entrepreneur maintaining motivation and work-life balance and improving their general knowledge. The results are largely aligned to the Entrepreneurial Ecosystem Framework by addressing the markets, human capital and support elements.

The results iterate that it is important for entrepreneurs to take necessary steps outside of the ordinary course of business, in order to ensure the success of their entrepreneurial endeavours. Furthermore, the identified factors and activities that entrepreneurs can engage in, can be used as funding criteria for investors.

Introduction

Purpose of the study

Entrepreneurship is of growing importance in economies as it facilitates economic growth and social development. However, in countries like South Africa there are many impeding factors that can affect the initiation and survival of entrepreneurial endeavours. Political instability and the corresponding decline in investor confidence and economic growth have created an environment of high income inequality and unemployment, with such schisms ever widening (Soni, 2017). Therefore, once initiated entrepreneurs need to do their part in ensuring the success of their businesses by engaging in specific tactical activities that can enhance their overall performance.

This study examines the relationship between activities that entrepreneurs engage in within their personal capacity and their overall business success. As the driving force behind the business, the entrepreneur is considered the main determinant of business success (Shane & Venkataraman, 2000). Business owners and entrepreneurs alike can use these results to determine what entrepreneurial-linked physical undertakings and activities to engage in, to enhance their success.

When success at an individual level is optimised it can be aggregated such that macro-economic growth and development can be improved. In this way the study is able to assist individual entrepreneurs and business owners in making more strategically beneficial decisions as this will be able to contribute to macro-economic growth via complex economic multiplier effects (Braunerhjelm, 2010).

Especially within a South African context, where poverty and unemployment are such prevalent issues, the economy is reliant on entrepreneurial activities to boost job creation and in so doing assist with alleviating poverty and income inequality (Odendaal, 2017). In light of the generally low start-up rates and high proportion of failing businesses, South African entrepreneurs are in need of assistance to ensure the survival of their entrepreneurial ventures (Timm, 2015). Almost 67% of businesses that closed in 2016 did so due to financial reasons including unprofitability and difficulty in accessing financing to sustain the business, which remains the most significant constraint for entrepreneurs (Herrington, Kew, & Mwanga, 2016).

Furthermore, banks and other funding agencies can use the results of the study to inform risk assessment models that they apply in extending funding. Traditional creditworthiness criteria are seldom applicable for informal entrepreneurs who lack formal business plans, credit history and other necessary track records. In this way the study can provide more relevant criterion that is still able to ensure the success of these entrepreneurs and provide the assurance required by banks and funding agencies to extend credit lines (Ramukumba, 2014).

Background context to the study

The role of entrepreneurship has been debated to be of vital importance in stimulating economic growth and social development globally, through a variety of ways (van Stel, Carree, & Thurik, 2005). Firstly, it is evidenced that entrepreneurs drive innovation and are able to bring to life new technologies, products and services (Acs & Audretsch, 2003; 1990). This can influence the mindset of citizens and create an innovative and entrepreneurial culture with a population that can recognise opportunity and transform it into a revenue generating model. Secondly, with this innovation comes

the prospect for job creation and skills transfer, which in the context of developing countries like South Africa is a dire need when considering the magnitude of poverty and income inequality that it is faced with (Incentives SA, 2014). Coupled with the recent slip into a recession after two consecutive quarters of negative GDP growth, the South African market is one of inadequate prospects (Lamprecht, 2017). Unemployment is currently at the highest level ever of 27.6% with youth unemployment at levels of over 65%. As the future workforce in the country, the lack of employment opportunities for youth delays their skills development and creates a reliance on older workers for productivity, which can be suboptimal to a large extent. This has created urgency for South Africa to enforce the necessary initiatives to grow the economy, with one such initiative aimed at stimulating entrepreneurship in the country (Herrington, Kew, & Mwanga, 2016).

When considering globalisation, the invigoration of markets that entrepreneurship can bring is key to integrating countries into the global business arena (Incentives SA, 2014). Businesses have a shared interest in the stability of the country in which they operate and the well-being of the citizens.

The mechanism for aggregating effects of individual level entrepreneurship on macro-economic growth is a complex one with few studies providing conclusive empirical results on the impact thereof. Those which provide a definitive result are restricted to specific countries and do not consider a broad population. However a study by van Stel, Carree, and Thurik (2005) that investigated the influence of total entrepreneurial activity on GDP growth, measured by GDP per capita for a sample of 36 countries, found that total entrepreneurial activity has an effect on GDP growth but that this relationship is not simple or linear in nature. It was established that for poorer or developing countries the relationship was negative and for richer nations the relationship was positive. The result does not imply that entrepreneurship in developing countries should be discouraged, but rather that these countries may not have sufficient presence of large companies, which aid the transition from developing to developed. Furthermore, the results may indicate that the total entrepreneurial activity of developing countries may include effects of small entrepreneurs that may be more productive earners in a larger company. However, such a case is applicable for more skilled or qualified employees and not necessarily blue-collar workers, who have limited available employment opportunities in large firms, especially in a country like South Africa (van Stel, Carree, & Thurik, 2005). Literature is aligned in asserting that entrepreneurship is important for economic growth and social development via job creation especially when considering the alternative to be unemployment.

Entrepreneurship is a term that has lacked consensus in definition for some time. Definitions have ranged across behavioural (the conducts that distinguish entrepreneurs), process (the entrepreneurial practices followed and its relation with broader society) and outcomes based (the results and goals of entrepreneurship) perspectives (Venter, Urban, Beder, Oosthuizen, Reddy, & Venter, 2012). The outcomes-based perspective is of relevance to this study as it encapsulates the need for economic growth and social development without prescribing the means of doing so.

An earlier definition was made by French economist Richard Cantillon who specified that entrepreneurship is self-employment of any kind that is generally risky in nature (Cantillon, 1931). Wennekers and Thurik (1999) and Gartner (1990) have aligned to this definition and considered entrepreneurs to be those that are self-employed as measured by the percentage of total

employment or the number of start-ups and new organisations created. Other scholars including Adam Smith, Alfred Marshall (Ahmad & Seymour, 2002) and Frank Knight (1921) have subsequently added leadership to this definition. However, the modern interpretation of entrepreneurship, that is most commonly applied, aligns with the Joseph Schumpeter definition which equates entrepreneurship with innovation. Businesses will identify opportunities and then use innovation to exploit these (Schumpeter, 1934). The common thread across all definitions is the high level of risk inherent in entrepreneurial undertakings.

A definition presented by Ahmad and Seymour (2002) defines entrepreneurs as business owners who “seek to generate value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.” This definition is largely all encompassing and caters for the elements of entrepreneurship that have been highlighted by scholars over time.

Entrepreneurship generally takes on four key forms including (Venter, Urban, Beder, Oosthuizen, Reddy, & Venter, 2012):

- **Extremist revolutionary** – Highly impactful entrepreneurs that pursue growth and innovation through novel ideas, thereby revolutionising the conventions of the market in which it operates.
- **Growth entrepreneurs** – Strong minded and creative entrepreneurs that pursue high growth ventures.
- **Lifestyle entrepreneurs** – Replicative entrepreneurs that pursue business ventures that are currently in existence. The impact of such ventures is often limited and primarily meets the profitability objectives of the entrepreneurs themselves.
- **Survivalist entrepreneurs** – Necessity driven entrepreneurs that pursue replicative business ventures in an effort to maintain a livelihood as there is no alternative source of income. These entrepreneurs operate primarily within the informal sector, with the impact of the business venture not extending beyond the entrepreneur. This form of entrepreneurship is borne from need and not the willingness of the entrepreneur to become a business owner (Social Agents Impact Consulting, 2017).

Extremist revolutionary, growth and lifestyle entrepreneurs are driven by opportunity, even when there exist other employment opportunities for them. It is found that for South Africa to support more employment creating entrepreneurs, it should sponsor entrepreneurs that are opportunity motivated and not those driven by necessity as they are more likely to affect value creation and growth. Opportunity motivated entrepreneurs can employ an average of six people during the business' first 3.5 years of operation, relative to the average of two people for necessity driven entrepreneurs. As a result of the legacy of Bantu education, Black entrepreneurs who form a large proportion of the survivalist entrepreneur population in South Africa are considered to be at a disadvantage in receiving private sector funding and support in that they have the lowest perceived capabilities (Nieman & Nieuwenhuizen, 2012). Scholars have questioned the dualism of entrepreneurship and instead view it as a continuum from opportunity to necessity motivation. It is argued that entrepreneurs operate between the extremes and can transition from one to the next depending on the maturity of their business ventures and the market experience that they have gained (Venter, Urban, Beder, Oosthuizen, Reddy, & Venter, 2012). It is therefore postulated that

entrepreneurship in any form should be encouraged and enhanced over time in order to create more highly impactful business ventures.

Entrepreneurs by their very nature are able to monetise ideas and innovations and in so doing contribute towards economic progress. Their innovations and businesses are able to challenge the status quo, thereby promoting competitiveness of business. It is this competitiveness that creates an environment that fosters economic development and growth (van Tsel, Carree, & Thurik, 2005; Geroski, 1989; Nickell 1996; Nickell et al., 1997). For instance, industries in the USA, that were not in existence almost 20 years ago, are responsible for more than half of the country's economic growth – testament to the importance of entrepreneurs in the economic landscape (Incentives SA, 2014).

The South African government has recognised the role of entrepreneurs in driving economic growth and social development. This is exhibited through the ten year vision of the Accelerated and Shared Growth Initiative in South Africa (ASGISA) for the country to shift towards an entrepreneurial nature such that its citizens and businesses are able to exploit opportunities to grow the economy and the reduce unemployment and poverty (South African National Government, 2006). Furthermore, the government has catered for those who were previously excluded from economic participation by providing small, medium-sized and microenterprises (SMMEs) across a range of industries with access to funding and business support. The local Department of Trade and Industry for example, disburses grants and incentives for qualifying businesses that are Black owned and operate in the industrial and power, agricultural, manufacturing, film and television and automotive industries to name a few (Department of Trade and Industry, 2017). The government has also created approximately 44 state-run incubators or Small Enterprise Development Agency (SEDA) incubators to support business development. Such incubators dominate the business incubation landscape and are often criticised for being aimed at young, unemployed or poorly skilled people that are most likely to create informal businesses, thereby not having the desired contribution to the nation's job creation objectives (Nieman & Nieuwenhuizen, 2012). By adopting the continuum view of entrepreneurship on the other hand, as mentioned above, it can be argued that such criticism is unwarranted as greater value creating entrepreneurship can emerge from survivalist beginnings over a longer term.

Additionally, with the greater emphasis on enterprise development and ownership requirements in the Broad-Based Black Economic Empowerment (B-BBEE) sector codes and charters, as evidenced by the increased weightings thereof, it is apparent that the government is geared towards expanding the market to new and growing businesses, thereby empowering local contenders (Nieman & Nieuwenhuizen, 2012). The 2016/17 Global Entrepreneurship Monitor (GEM) has revealed that opportunity driven entrepreneurs in South Africa are predominantly white. However, with B-BBEE sector codes and charters stringently aimed at empowering Black businesses, these white entrepreneurs could be overlooked thereby preventing the full potential for job creation from being realised.

In response to the stringent requirements laid out in the B-BBEE sector codes and charters, businesses have undergone ownership restructurings to allow for the inclusion of Black participants as well as revised their procurement practices and social development policies to ensure that local Black businesses and communities are able to access more economic opportunities. Such requirements will need to be adhered to should businesses want to maintain their competitiveness

in engaging with government enterprises or organs of state in working relationships (Brand South Africa, 2017).

Although it would appear that the public sector should champion the achievement of the United Nations Millennium Development Goals including that of reducing poverty, such problems are wicked in nature and as a result are highly complex, with many interrelationships. Therefore, the potential solutions for these structural economic problems are equally complex (Incentives SA, 2014). Research suggests that the most effective strategy for tackling wicked problems would require the collaborative efforts of other stakeholders in society, particularly the private sector and its constituent entrepreneurs and business incubators, for its roll-out and implementation (Australian Public Service Commission, 2007; Shaikh & Soni, 2014). Approximately 78% of the more than 110 incubators in South Africa are partially state funded. Strict funding criterion and constrained fund sizes within the SEDA incubation network result in limited access to incubators by entrepreneurs. Therefore, more private sector role-players, especially banking institutions, are encouraged to foster entrepreneurial growth through similar advisory services and financial support (Breytenbach, 2016).

There are more than 5.6 million SMMEs in South Africa that collectively account for 90% of the expected jobs to be created. These SMMEs contributed 35% towards GDP in 2007 with this target expecting to grow to 60% - 80% over the next 10 - 15 years, iterating the importance of entrepreneurial endeavours in driving South African economic growth (Odendaal, 2017). When considering the decline in entrepreneurial intentions in South Africa to almost half their 2010 level, more concerted efforts need to be made to ensure that opportunity driven entrepreneurship is fostered and sustained, to help achieve expected growth targets (Herrington, Kew, & Mwanga, 2016).

Problem statement

Professional competency refers to the theoretical and practical readiness for professional activities. Within the context of entrepreneurship this will refer to the readiness for entrepreneurial activities. When considering competency-based theory it is acknowledged that professional competence is multidimensional and includes cognitive, functional, personal, ethical and meta-competences. Cognitive competence includes both formal and experiential knowledge. Functional competence includes skillset. Personal competence refers to behaviours of individuals and ethical competence refers to opinions and values. Lastly meta-competences refer to the ability to deal with uncertainty and other teachings or criticism (Makulova, et al., 2015).

Thus, entrepreneurial success is contingent on the highly developed overall competencies of an individual. It is not exclusively dependent on psychological factors or mindset. Many studies have been conducted internationally to determine the factors driving entrepreneurial business success. These studies have largely focused on analysing psychological attributes of entrepreneurs and macro level policies and support structures and their influence on business success. Collectively these studies have not been able produce consistent or conclusive results (Aplin & Leveto, 1976).

Those studies that evaluated success aiding factors outside psychological or personal trait-centric ones have largely been conducted to provide frameworks for investors or financiers to evaluate potential funding opportunities. However, many factors examined in these studies, lack relevancy for developing nations where more informal businesses exist that do not meet the necessary criteria

in order to qualify for funding. With financiers and investors seldom taking an interest in psychological factors or personal traits and with current funding criteria not being applicable, these SMMEs are faced with a dilemma in being unable to access necessary funding.

Without necessary funding SMMEs are unable to be established and for those in existence they are unable to fund the costs of operation or expansion thereby limiting their likelihood of survival or their ability to grow and create more employment opportunities, respectively. In this way the unemployment and social inequality problems in the country are maintained and at worst compounded, ever increasing the burden on the state to provide for these individuals.

The overarching question becomes what factors or types of activities can be used to signify business success, that are more tactical and action-orientated in nature, to better account for SMME owners? Such factors or activities can be used as funding criteria for investors and be undertaken by entrepreneurs to enhance their business success. Literature argues that entrepreneurs themselves are the main determinant of business success (Shane & Venkataraman, 2000). Yet with characteristically high failure rates in South Africa that are linked to funding shortfalls, they are further pressed to do what is necessary to ensure business survival (Crampton, 2016). Hence the study chose to assist in providing entrepreneurs with more tactical and strategic action plans to enable their business success.

The study is guided by the following research questions:

- How do independent variables (i.e. activities engaged in by entrepreneurs outside the ordinary course of business) relate with the dependent variable (i.e. business success)?
- To what extent do these activities engaged in by South African entrepreneurs affect their business success?
- How can these activities be summarised into overarching categories of activities (i.e. factors)
- How best can entrepreneurs use the findings to model their activities to enhance their business success?

The study assumes the continuum view of entrepreneurship - that all entrepreneurs are able to contribute towards economic growth - and therefore explored business success in the context of South African self-employed entrepreneurs that both own and are operationally involved in their respective business ventures. No restrictions were made on the geographical areas or industries in which the entrepreneurs operate, nor was the size of the business venture be subject to thresholds. Entrepreneurs in both the informal and formal sector were considered. The focus was on businesses that were operational for at least one year to enable success to be measured through use of growth and financial performance indicators.

Literature Review

Defining business success

The definition of business success has been shown to be open to debate but is consistently concluded to be multi-faceted and includes growth and financial performance indicators, with the latter being favoured in literature (Wiklund, 2006). Growth and financial indicators are generally easy to source and specify trends over time, which are clearly interpretable (Baum, Locke, & Smith, 2001).

Researchers are recently however applying the notion of longevity or life span of the business (Stefanovic, Prokic, & Rankovic, 2010). In Nahar's (2015) study on the success factors of women entrepreneurs in Bangladesh, success was defined as survival (i.e. uninterrupted business operations) for a period of at least 3 years. This study will adopt one such definition for success and classify relatively more successful businesses as those which have survived for a greater number of years.

Financial performance is often measured by stable revenues and profitability and overall healthy cash flows. The combination of financial performance indicators is normally applied in studies as profitability alone can be an unclear metric. Early-stage businesses for example are unable to use profitability as a measure of financial performance until such time as they begin generating profits. Other businesses within a growth phase may also be seen as unprofitable when in fact they are investing funds into the business for expansion purposes. The most preferable approach as argued by Wiklund (2006) would be to use both growth and financial performance indicators for business success as this would provide a more robust overview (Wiklund, 2006).

The study by Sambasivan, Li-Yen, Che-Rose, & Abdul (2010) used sales growth as a measure of business success. This was based on previous research which indicates that sales is a suitable measure of success across different types of firms (Davidson & Wiklund, 2000) and that this indicator is favoured by many entrepreneurs themselves (Cassar, 2006; Flamholtz, 1986).

Other growth indicators that have been applied in research studies include growth in market share, profitability and the number of employees. The use of a range of growth indicators supports the notion that business performance is multi-faceted (Chrysostome, 2010; Keats and Hitt, 1988; Muse, Rutherford Oswald and Raymond, 2005).

Defining entrepreneurial success aiding factors

International research relating to socio-psychological factors (i.e. personal characteristics or attributes) and their link to entrepreneurial success have dominated literature (Robotham, 2014; Caliendo, Fossen & Kritikos, 2011; Karahan & Okay, 2011). Most endeavoured to isolate a few key factors and evaluate the relationship with business performance, but failed to produce results that were conclusive and consistent across studies (Aplin & Leveto, 1976). These inconsistencies could be attributed to differences in sample populations and the socio-economic contexts in which they operate (Stefanovic, Prokic, & Rankovic, 2010), as well as a lack of uniform conceptual frameworks or definitions that could be empirically evaluated. Furthermore, the inconclusive results reinforce that business success is dependent on a multitude of factors (Aplin & Leveto, 1976).

The full extent of factors affecting business success can include exogenous factors and economic conditions in addition to endogenous or socio-psychological factors (Galawe, 2017). Generally countries that are relatively economically stable are likely to be more conducive towards entrepreneurial success whereas those with economic and political volatility could be plagued with issues such as unemployment, policy restrictions, limited capital availability or high taxation for instance, which impede business performance (Fuduric, 2008).

Personal traits

In a study by Frese, Brantjes and Hoorn (2002), psychological attributes and personal traits including the search for independence, an innovative mind set and a risk seeking and competitive attitude have been found to influence business success. The results of this study were supported by Rauch and Frese (1998). For the purposes of this study however the personal traits of the entrepreneur will not be investigated as it is a complex concept to analyse and can seldom be changed or adapted. It is therefore not subject to direct influence in order to affect business success and has produced insignificant results when its relationship with business success was previously examined (Urban, 2012).

Cognitive styles, self-efficacy and human capital will be incorporated into this study and aid variable selection (i.e. activities for entrepreneurs to engage in), since these elements work together and can be measured and changed or learned to influence business success (Shane, Locke, & Collins, 2003). These three elements were used to represent entrepreneurial risk in a study by Galawe (2017) where the risk factors of entrepreneurial success in South Africa were modelled.

Cognitive styles refer to the preferred ways that individuals learn, gather knowledge, process information and make decisions on a daily basis, thereby influencing the way in which people behave and act. Cognitive styles can generally be intuitive or analytical and although neither has been proven to contribute more towards business success, they are each applied to greater extents at different stages of business maturity (Barbosa, Gerhardt, & Kickul, 2007).

Self-efficacy is defined as an individual's belief in their capabilities to execute on a required course of action in order to produce desired outcomes. Generally entrepreneurs who have a high level of entrepreneurial self-efficacy have a higher chance of business success due to their perseverance and motivation (Bandura, 1994). Self-efficacy is task-specific and is best assessed regarding tasks or behaviours (Bandura, 1986). The sources of self-efficacy will be of interest to the study as these will greatly inform the selection of variables for the data analysis. Self-efficacy is seen to originate from four key sources including (Bandura, 1997):

- **Mastery experiences:** Prior entrepreneurial success is likely to boost self-efficacy whereas failure is likely to decrease it.
- **Vicarious experiences:** Entrepreneurs will judge their own abilities based on the performance of role models or peers who they observe in entrepreneurial endeavours. Success will boost self-efficacy whereas failure is likely to decrease it.
- **Social persuasion:** Entrepreneurs will receive either positive or negative feedback on their ability to complete tasks with positive feedback improving self-efficacy and negative comments decreasing it.

- **Physiological and psychological well-being:** Entrepreneurs' feelings, health and psycho-physical stimulation can impact their perception of their abilities. When these factors are unfavourable or negative an entrepreneur may not be able to perform optimally thereby decreasing their self-efficacy.

Sometimes self-efficacy was shown to exhibit a negative relationship with business success, with this relationship being rationalised by overconfidence, leading the entrepreneur to become complacent and not exert as much effort as previously done (Barbosa, Gerhardt, & Kickul, 2007).

Human capital theory indicates that people (i.e. the entrepreneur and employees) have varying knowledge and skills that can have an economic value benefit to themselves and the business they work for. There is significant evidence which suggests that investment into human capital is necessary as "more highly educated and skilled persons almost always tend to earn more than others" (Becker, 1975). The results have been maintained for developing and developed nations including India and Cuba and the USA and Soviet Union respectively. Although the potential for greater earnings as a result of investment into human capital may hold true for corporate environments, the potential for entrepreneurs remains under speculation. It cannot be disputed that more technical industries may require a more developed skill set and deeper knowledge from the entrepreneur, without which their business success may be limited. Therefore entrepreneurs should be compelled to upskill themselves and their employees in order to enhance business success, particularly if operating within a technical industry with complex product and service offerings.

Social competence

Rauch and Frese, went on to suggest that experience and training, managerial skills and the external market environment can complement favourable psychological attributes and enhance business success. The importance of social networks and influential contacts has also been widely acknowledged to contribute towards business performance (Elfring & Hulsink, 2007).

There is significant empirical evidence to suggest that social competence – or the capability of entrepreneurs to interact effectively with others – is a determinant for business success. This relates to the ability of entrepreneurs to articulate views and explanations concisely, be approachable and personable thereby gaining the favours of investors and clients and having a sound understanding of emotional intelligence to be able to lead their workforce effectively.

In a study by Baron (2000) the effect of social competence by entrepreneurs as reflected by social perception, impression management, persuasiveness and social adaptability, on financial success was measured. Social perception and social adaptability in particular were observed to significantly influence financial success of the entrepreneur.

Growth through social capital has displayed a critical role and corresponds with the abovementioned significance of social competence in driving business success (Welsch & Liao, 2000).

Education and skill set

Literature on entrepreneurship maintains that education, knowledge and entrepreneurial experiences are without question critical for influencing one's level of self-efficacy and in turn business success (Arora, Hynie, & Laurence, 2013). Education or specialised entrepreneurial training through formal institutions or other external channels can improve market knowledge and help

entrepreneurs to develop the skill set and management capabilities needed to actively pursue business success (Von Broembsen, Wood, & Herrington, 2012). The view that highly knowledgeable entrepreneurs are most likely to create successful businesses is consistent with human capital theory (Unger, Rauch, Frese, & Rosenbusch, 2011).

In a study by Bates (1990) the education level and financial capital reserves of business owners were found to be critical factors of business survival. Nahar's (2015) study on success factors for women entrepreneurs in Bangladesh revealed 23 of 30 factors to be statistically significant. Those that are relevant for the purposes of this study include access to necessary training and a formal academic career. The other factors that are linked to psychological attributes, government policies and entrepreneurial support frameworks and other macro-economic elements had shown similarly significant relationships with business success for the women entrepreneurs (Nahar, 2015).

Studies were additionally conducted to understand the factors to aid business success within the context of business growth. This was seen in a study by Sambasivan, Li-Yen, Che-Rose, & Abdul (2010) which investigates the personal initiative, human capital and other competencies on the growth of entrepreneurial endeavours in Malaysia. Human capital was identified as an additional business growth element when considering the entrepreneurs' family environment, educational background, age, work experience, network of contacts and entrepreneurial drive. Other research indicates that a higher level of education and work experience can improve the knowledge base of entrepreneurs giving them more to draw from (Robb and Fairlie, 2007; Lussier and Pfeifer, 2001; Yusuf, 1995).

Within South Africa it is found that opportunity driven entrepreneurs are more likely to have a tertiary education and that these entrepreneurs are likely to employ 5.5 people compared to the 1.2 people for entrepreneurs with a secondary school level education (Nieman & Nieuwenhuizen, 2012).

Literature does not provide well-defined measurement scales for knowledge and expertise therefore most studies tend to use education levels and years of experience as proxies for knowledge and skills (Galawe, 2017).

Some studies have focused on financial factors that aid business success. One such study by Nieuwenhuizen and Kroon (2003) aimed to determine success factors of small industrialists and the extent to which these were used as investment criteria by financiers. Although personal characteristics including creativity and innovation and commitment to the enterprise featured as statistically significant personal characteristics that are considered by financiers, the majority of factors that are considered are those related directly to functional management skills. Financiers are less concerned with the positive attitude and approach of entrepreneurs and more interested in their tangible skills and track record of delivery as it is these factors that will ensure economic returns to the financiers. Management skills encompass core business skills, knowledge of the market and competitive landscape as well as utilisation of experts and other relevant contacts (Nieuwenhuizen & Kroon, 2003).

Experiences

Experiences are also seen as key determinants for entrepreneurial success and are defined as the time, in years, spent on tasks to enhance entrepreneurial related skills that can be applied in a current entrepreneurial endeavour (Gompers, Kovner, Lerner, & Scharfstein, 2006). Prior start-up

experience in particular can enhance business success. Many entrepreneurs and experts in the field have highlighted that prior start-up experience, whether successful or unsuccessful, can be a fruitful learning experience (Farmer, Xin, & Kung-McIntyre, 2011).

Support networks

Additionally, a supportive family unit can enhance business success particularly if there are other individuals in the family that also own businesses (Cooper, Dunkelberg, & Dennis, 1990). The ability to relate to and use these relatives as role models can inculcate an entrepreneurial spirit and help broaden experiential learning. Furthermore, network theory specifies that networks can help a firm or entrepreneur overcome any resource shortages that they may have. Literature has converged in concluding that network relationships are necessary for business success, especially when defined in the context of internationalisation (Sekliuckiene, 2015).

Age and gender

With the orientation of policies and support structures inclined towards youth and female entrepreneurship, it is more likely that younger or women entrepreneurs will be more successful than their older or male peers. However from an experiential perspective these younger entrepreneurs are on the back-foot and would have to compensate for any knowledge and experience deficits. It is notable however that participation in entrepreneurial activities by 25-34 year olds in South Africa has declined by ~40% from 2015 levels. South Africa is also below the African average in terms of early-stage entrepreneurial activity by 18-24 year olds, a further cause for concern. Consistent growth in entrepreneurial participation by 45-54 year olds has been experienced that is most likely a result of older workers being made redundant and turning to entrepreneurship in light of limited prospects in the job market. In addition, 2016 saw almost 7 women for every 10 male entrepreneurs engaging in early-stage entrepreneurial activities, which is in alignment with the African average (Herrington, Kew, & Mwanga, 2016).

Within the context of this study age and gender will not be used as variables but rather will be used as descriptive elements to understand the features of the sample of entrepreneurs included in the study.

Personal habits

Although there have been no formal studies conducted that account for the factor, entrepreneurs have highlighted that taking breaks and relaxing can contribute to success as doing so helps to clear an entrepreneur's mind and spark more innovative and creative thoughts (Lahary, 2015).

Conclusion

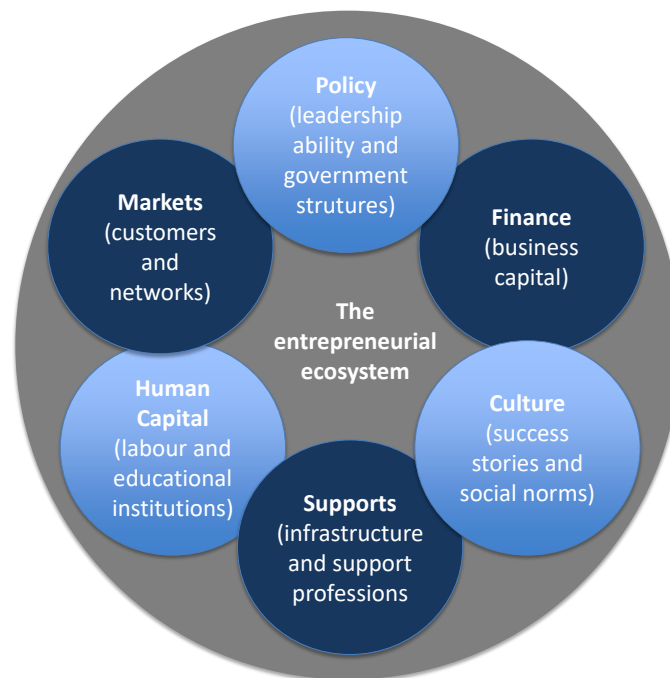
Many research studies in recent time fail to understand the origins or contributing actions of the abovementioned success aiding factors and the link of these to success. Following such an approach for variable selection instead may create more tactical outcomes that entrepreneurs can use to inform their strategic decision making and actions (Nieuwenhuizen & Kroon, 2003). This study aims to fill such a gap and provide an understanding of the tactical actions and activities entrepreneurs can engage in order to enhance their business success.

The entrepreneurial ecosystem framework, outlined in Figure 1: The entrepreneurial ecosystem, was used as the basis for identifying activities that entrepreneurs can engage in outside their personal capacity and in turn the development of the survey for this study. These broad themes are largely

aligned with literature and together with the specific questions posed in the survey, were vetted by select entrepreneurs to ensure their relevance. Additional questions were included upon the advice of select entrepreneurs.

The survey responses were devised on a 4-point Likert scale as informed by discussions with entrepreneurs. Literature has revealed that shorter scales with two, three or four response categories are considered easy to use by respondents. However, such scales are also disadvantageous in that they do not provide sufficient categories for respondents to adequately express their feelings. By using quantitative groupings in the survey, this study aims to mitigate such a risk and better allow respondents to select a suitable option (Preston & Colman, 2000).

Figure 1: The entrepreneurial ecosystem



Source: Venter, Urban, Beder, Oosthuizen, Reddy & Venter (2012)

After consolidation of literature and engagement with select entrepreneurs, the hypothesis that is considered in the research study is that the composite factors derived from the abovementioned variables, will display a positive and significant relationship with business success. Undertaking any combination of the abovementioned private activities will enhance business success.

Methodology

Research methodology

Research involves collecting and assembling data and then applying various analysis techniques to observe patterns or relationships in the data thereby validating or refuting proposed hypotheses (Rabinowitz & Fawcett, 2017).

In general studies can apply a qualitative, quantitative or mixed technique for designing research. A qualitative technique is utilised when using non-numerical data in answering hypotheses and forming new theories. Quantitative techniques in contrast place emphasis on numerical data and the measurement of relationships between variables (i.e. independent and dependent variables) often through statistical means. Mixed techniques apply both quantitative and qualitative analysis and, in this way leverage the strengths of both (Brooks, 2008).

The quantitative technique is applied to achieve the objectives of the study as it is a natural fit for the assembly of a study to answer the stated hypotheses from theory, questions, data collection and analysis and empirical findings (Bryman & Bell, 2007). The study is cross-sectional in nature and focuses on the responses of entrepreneurs at a point in time. The downfall with a cross-sectional study is that the interpretation of findings is unable to infer causality with high levels of certainty (Galawe, 2017).

The study is also guided by a post-positive philosophical orientation. This implies that researchers cannot be positive about the proposed findings or knowledge reached when studying human behaviours and actions. In this way the approach allows for objectivity when making inferences from data analysis. The post-positivist approach has its roots in social and behavioural research but can also be applied in entrepreneurial research (Phillips and Burbules, 2000; Creswell, 2013; Galawe, 2017).

Research design

Research design refers to the methods and procedures used in collecting and analysing the variables specified in the research problem (Brooks, 2008). The research study focuses on understanding the relationship between activities that entrepreneurs can engage in within their personal capacities and business success. In this way the study is analytical and descriptive and was conducive for a survey method of data collection (Bryman & Bell, 2007).

The descriptive element focuses on the age and years of experience of the entrepreneur as well as the type of business and the industry in which it operates. The survey helped to enable identification of relationships between variables and allow for multiple entrepreneurs to provide responses simultaneously (Bonita, Douglas, Winkelmann, & DeCourten, 2003). The survey was administered online via Google Survey and in this way was a more cost-effective method for data collection. However, a shortcoming in this approach is that self-administration limits the ability to generate detailed insight and feedback.

Population and sample

The South African entrepreneurial landscape sees 6.9% of the adult population involved in early-stage entrepreneurial activity (estimated 2.16 million people) and 2.5% of the adult population involved in established businesses (estimated 783 000 people) (Herrington & Kew, 2017; Statistics South Africa, 2016). This number however can be underestimated when considering the large number of informal businesses in South Africa that may not be registered and therefore would be unaccounted for (Ramukumba, 2014).

The data required for the assembly of the research study was dependent on engagement with existing business owners, entrepreneurs and entrepreneurial-related organisations. There are no distinct methods on how to generate an optimal sample size for a factor analysis in literature and many researchers question the importance of sample sizes in the first place. Literature has been divided on the number of participants per variable to use but as evidenced by Galawe (2017) the general rule of thumb varies from 5-20 responses per variable with 300 shown to be good sample size for any analysis (MacCallum, Widaman, Zhang & Hong, 1999; Mundfrom, Shaw & Ke, 2005). For the purposes of the study a sample size of 136 entrepreneurs, as per the requirements of the participant-variable ratio, was consulted in the capacity of subject-matter experts. With 17 variables used in the study, the 137 lies above the minimum of 85 respondents needed to abide by the rule of thumb, in order to yield statistically significant and representative results.

The entrepreneurs that were consulted are individuals who are self-employed, and in this way align with one of the first noted definitions of entrepreneurship asserted by Cantillon (Cantillon, 1931). In conjunction with being a business owner, the entrepreneurs are involved in the daily running of the business, thus differentiating them from financiers and ensuring relevant input (Ahmad & Seymour, 2002). Whether the business is in existence currently or not, was irrelevant as the study aims to capture the learnings of successful and previously unsuccessful businesses (Sambasivan, Li-Yen, Che-Rose, & Abdul, 2010).

Additionally, entrepreneurs were consulted irrespective of the size of the staff compliment and nature of the business itself – either innovative or one which replicates existing business ideas. Although this application of definition contradicts the characteristics of entrepreneurship normally proposed in literature, it has been applied as such due to data limitations as a result of the relatively small population size of truly innovative local entrepreneurs. Risk, however, is embodied within the concept of business ownership, thereby corroborating the use of self-employment of any kind as the key underpinning of entrepreneurship (Ahmad & Seymour, 2002).

Sampling generally takes on a probability sampling form or a non-probability sampling form. The former uses random sampling techniques to develop a sample whereas the latter uses more deliberate techniques like researcher judgement or convenience sampling. Probability sampling remains the more preferred form as it allows for generalisation of the results and inferences to be made as a sample is created that is truly representative of the population. This form was applied to the study when approaching entrepreneurial-related organisations to distribute surveys to their network of entrepreneurs. However, a non-probability form was also adopted when approaching known entrepreneurs for responses as it aids convenience in data collection (Glen, 2015). Other platforms including LinkedIn and Facebook were also leveraged to broaden the pool of

entrepreneurs surveyed. Use of these platforms also minimised bias by including entrepreneurs that may not be affiliated with formalised entrepreneurial-related organisations.

Procedure for data collection

Primary data for the study was collected through online self-administered surveys. The survey was designed in such a way so as to avoid prejudicing respondents and refrained from collecting personal details. Respondents were assured of their confidentiality in the cover detail to the survey. The survey was vetted for potential ethical concerns by the relevant Wits Business School ethics committee before being transferred into an online format using Google Survey. The self-administered nature of the survey allowed for confidentiality of responses but also limited the entrepreneurs from responding in a biased manner or conforming to social desirability (Cooper & Schindler, 2011).

The survey was available for completion for a two-month period to give entrepreneurs sufficient time to respond but also to provide a period of time long enough to monitor response levels and solicit responses more aggressively, through different channels, if necessary. Periodic follow-up electronic mails were sent after the initial week of data collection and one week prior to the close of the survey completion, in order to boost the response rate.

The survey was distributed to the entrepreneurs through social media platforms and directly or through an entrepreneurial-related organisation. This approach ensured that data collection was conducted in an ethical manner by firstly receiving informed and willing participation, constructing the survey in a manner that avoided time wastage and asking unnecessary information and lastly by clarifying any uncertainties regarding the survey itself. The entrepreneurs were assured that all information collected was confidential and anonymous.

Entrepreneurs and entrepreneurial organisations

Entrepreneurs and entrepreneurial-related organisations were approached directly regarding the importance of the research and to solicit support in completing the survey and distributing it to the relevant network of entrepreneurs, respectively, through a formalised electronic letter. An overview of the relevance of the study and the link for the survey were distributed to the relevant parties via electronic mail once consent had been received to engage in the survey process.

Social media networks

A link to the survey was posted on Facebook and LinkedIn, requesting entrepreneurs to complete the survey. The link was accompanied by an overview of the importance of the study. The post was shared in periodic intervals to ensure that more entrepreneurs were made aware of the survey.

Online platforms are beneficial in that they make use of a researcher's existing network of contacts, which improves the likelihood of response.

Data analysis and interpretation

The analytical research was conducted using an anova and factor analysis, to either confirm or reject the proposed hypotheses and involved the use of the SPSS statistical package. The anova and factor analysis enabled the range of variables (i.e. activities) to be summarised into a smaller set of new latent factors, by modelling the variables as linear functions of the factors. The downfall in this analysis technique is that factor analysis is largely an exploratory technique that can be dependent

on subjective judgements. The engagement with entrepreneurs and entrepreneurial organisations however, attempted to mitigate subjectivity where possible (Brooks, 2008).

The factor analysis determined the most important identified activities and their relationships on various business success indicators and generally takes on the following form:

$$Y_i = \beta_1 F_1 + \beta_2 F_2 + \dots + \beta_n F_n + e_i$$

Where:

Y_i = observed variable (business success indicators)

β_n = factor loadings or coefficients of each unobserved factor

F_n = factors that are summarised from the full list of variables

e_i = error term

There are several methods for factor extraction with the most commonly applied one being principal component analysis (PCA). This method of factor extraction is usually the default selection on most statistical packages. Researchers conversely argue that PCA is not ideal for factor analysis and instead use principal axis factoring (PAF), as with the study by Galawe (2017). This was supported by Ngunjiri, Kihoro and Waititu (2015) who concluded that PAF was preferred to PCA in their study to determine the causes for high populations in urban areas as it accounted for more of the total variance. Their findings are summarised below in **Error! Reference source not found.** and align with the arguments of other researchers.

Table 1: Comparison of PCA and PFA

Principal Component Analysis	Principal Axis Factoring
The method does not take into account the measurement errors. It assumes that each variable is perfectly reliable and that's why the method produced initial communalities as 1's.	Takes into account the measurement errors (the variance not attributable to the factor an observed variable represents) and thus does not produce initial communalities as one.
The method is not able to discover weaker factors.	The method is able to recover weaker factors from weaker the factor loadings (Dodou & Winter, April 2012).
Its goal was to determine the structure.	Its goal was to discover the structure and not to determine it.
The method extracts the unique variance only. It did not take into account the error variance.	PFA removed the unique and error variance and so its results were much more reliable.

Source: Ngunjiri, Kihoro, & Waititu (2015)

For the purposes of this study the PAF method of factor extraction was adopted instead of PCA. The use of this method was expected to produce more robust and reliable results.

In retaining variables, the number of meaningful variables to retain was determined using three measures including the following (Brooks, 2008):

- **Kaiser's Criterion:** Variables with an eigenvalue greater than 1 are retained as they account for greater amount of variability. This method is preferred when there are a smaller number of variables present.

- **Scree plot:** Variables are plotted in descending order of eigenvalues and analysed for a “break” in the plot that separates large and small eigenvalues. Eigenvalues that fall before the “break” are retained. The shortfall in this method is that the “break” in the plot may not be easily observable, which justifies its use in combination with the other two methods.
- **Percentage variance explained:** Variables are retained if they account for a specified percentage of variance in the dataset with the proportion calculated as $\frac{\text{Eigenvalue for a variable}}{\text{Total eigenvalues of correlation matrix}}$. The denominator is equivalent to the number of variables as each variable has a unitary variance. Ideally researchers should retain the fewest variables that explain the highest cumulative proportion of variance.

Nahar (2015) used similar research design techniques in her study to investigate the success factors of women entrepreneurs in Bangladesh although used the PCA method for factor extraction. Moreover this study applied a more detailed descriptive research design in order to describe the characteristics of the population of women entrepreneurs and their businesses. Galawe (2017) applied the same research design and was explicit in using a PFA method for its proven benefits.

The descriptive statistics help to describe the entrepreneurs in more detail and convey profiles of the entrepreneurs in tabular and percentage forms (Nahar, 2015). Data including the types of industries in which the entrepreneurs operate and their years of experience as an entrepreneur are analysed.

Anova uses F-tests to statistically test the equality of means of more than two groups and in this way evaluates the hypotheses posed in the study, drawing conclusions about the population based on the sample. F-values that are higher than the F-statistic imply greater variability and differences in the means of groups. In such a case the null hypothesis of equality of means will be rejected. The F-statistic will be used in combination with the p-value. In testing each hypothesis, a 5% level of significance is assumed (i.e. $\alpha = 0.05$). For each of the variables (i.e. activities) a p-value will be generated, which if lower than 0.05, causes the null hypothesis to be rejected. This will imply that there is a statistically significant relationship between the success of the entrepreneur and the derived factors, which are composed of activities that entrepreneurs undertake in their personal capacity, outside the ordinary course of business (Brooks, 2008).

Viability and reliability

Validity refers to the degree to which a measurement tool measures the intended research concept. Validity can be internal or external. Internal validity looks at how accurately the results obtained from the measurement tool quantifies the research constructs it was designed to measure whereas external validity refers to how accurately the results obtained describe the reference population. Reliability refers to the degree to which the results generated by the measurement tool can be replicated. Reliability is necessary but not sufficient to establish validity, therefore the need to test both (Bolarinwa, 2015).

Face validity will be applied to the survey by engaging with select entrepreneurs initially to determine that tests are valid measures of the concepts under review and that the survey is well constructed and easily understood. Although researchers question whether face validity is an active measure of validity it is adopted in this study in the form of a sense check and is supported by other statistical and mathematical based validity and reliability measures (Bolarinwa, 2015). The response

rate as measured by $\frac{\text{Total number of responses}}{\text{Total number of sample}} \times 100$ will provide a further measure of validity. Larger response rates are preferable as they provide more reflective results of the reference population (Nahar, 2015). Coupled with this the entrepreneurs will be urged to be honest in their responses thereby taking a further step to ensure a higher level of validity (Galawe, 2017).

Reliability of the data was established through a Cronbach Alpha test. The Cronbach Alpha test is the most commonly applied test of internal consistency reliability. The Cronbach Alpha scores range from 0 to 1 with researchers striving to achieve a value of 0.7 or higher as higher scores imply greater reliability of the measurement tool (i.e. survey) (Bolarinwa, 2015).

Findings

Sample characteristics

137 responses were received from entrepreneurs. This translates to a response rate of 0.02% which is almost negligible. Therefore, the validity of the study can be improved for future studies by increasing the survey response rates.

Of these responses, one was excluded as the data provided was incomplete and therefore unusable. After the data screening and cleaning process, 136 responses were therefore used in the sample for further analysis.

Table 2: Breakdown of sample population across gender, age category and sector

Age (years)	Male			Female			Total
	Formal	Informal	TOTAL	Formal	Informal	TOTAL	
20-35	11	18	29	6	16	22	51
36-60	26	5	31	28	6	34	65
>60	11	2	13	1	6	7	20
	48	25	73	35	28	63	136
	Combined 783 years of experience			Combined 624 years of experience			

As per Table 2 above, the sample characteristics results reveal that more males (53.7%) than females (46.3%) were sampled overall. Most of the respondents were in the age category 36-60 years (47.8%) followed by 20-35 year olds (37.8%) and those over 60 years old (14.4%). Additionally, more respondents operate in the formal sector (61.0%) than the informal sector (39.0%). Female entrepreneurs are exhibited to dominate the informal sectors. It is positive to see a large proportion of younger entrepreneurs, but the results emphasise the need to promote youth entrepreneurship in the country, particularly when considering the high unemployment rates.

Overall the male entrepreneurs had an average entrepreneurial experience of 10.7 years per entrepreneur, compared with the 9.9 year average of their female counterparts. Females in South Africa are slowly growing in number with more operating small, informal businesses to supplement their household income.

Table 3: Breakdown of sample population across gender, sector and industry

Industry	Male		Female		Total
	Formal	Informal	Formal	Informal	
Financial services	12	-	2	-	14
Retail (food, clothing, etc.)	23	16	24	14	77
Engineering, industrial manufacturing and construction	4	2	-	-	6
Healthcare	1	-	3	-	4
Education services	3	5	-	5	13

Hospitality and leisure	-	2	4	4	10
Technology, media and telecommunications	5	-	-		5
Other	-	-	2	5	7
	48	25	35	28	136

Table 3 above illustrates the sectors in which the sampled entrepreneurs operate. Most entrepreneurs operate some form of retail (56.6%) business followed by financial services (10.3%) and education businesses (9.6%).

Factor analysis

The exploratory factor analysis was performed using SPSS for all the entrepreneurial activities, to determine the number and structure of factors. The extraction of factors was done using PAF with Kaiser's criterion and scree plot. Promax rotation was adopted to optimise the factor structure due to the assumption of dependency between variables. The pattern matrix was used for interpretative purpose above the structure matrix, as it is easy to interpret and indicates the unique contribution of each variable to the factor (Brooks, 2008).

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.724
Bartlett's Test of Sphericity	Approx. Chi-Square	318.359
	Df	136
	Sig.	0.000

As per Table 4 above, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy varies between 0 and 1, with scores closer to 1 indicating sample data adequacy. The results have revealed that the sample size and set of variables used in the study were suitable for factor analysis as the KMO score of 0.724 is relatively high. The Bartlett's Test of Sphericity checks to if there is redundancy between variables that can be summarised with some factors. Taking a 95% level of significance ($\alpha = 0.05$), it can be deduced that factor analysis is valid for the study as the p-value of 0.00 is less than 0.05. There is thus a statistically significant interrelationship between variables, allowing for summary of variables into common factors (Brooks, 2008).

The PAF was conducted on the 17 variables and as per Table 5 below, 3 factors were extracted with five variables in Factors 1 and 2 and four variables in Factor 3. Factor 1, particularly has factor loadings well above the acceptable limit of 0.5. Factor 3 has factor loadings that are weaker relative to Factors 1 and 2. However, based on the scree plot and total variance explained in Table 6 and

Table 7 respectively, retaining three factors will allow for 42.848% of the variance to be accounted for. Although this is not a significantly large proportion of the total variance, the inclusion of the third variable will add 8.6% to the total variance explained.

Factors including Other current business ventures, Stakeholder engagement and Engage in skills development did not load significantly on any factor and were thus removed from further analysis.

Table 5: Pattern Matrix of entrepreneurial activities

	Factor		
	1	2	3
Attending industry events	.685		
Reading books/articles	.668		
Attending entrepreneurial events	.657		
Using online resources	.603		
Broad network engagement	.440		
Other current business ventures			
Stakeholder engagement			
Engage in skills development			
Relaxation		.512	
Family time		.505	
Mentor/mentee relationship		.447	
Attend motivational talks		.436	
Previous business ventures		.410	
Complete university degree			.575
Engagement with new people			.411
Track current affairs			.407
Complete a short course			.403

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table 6: Total Variance Explained

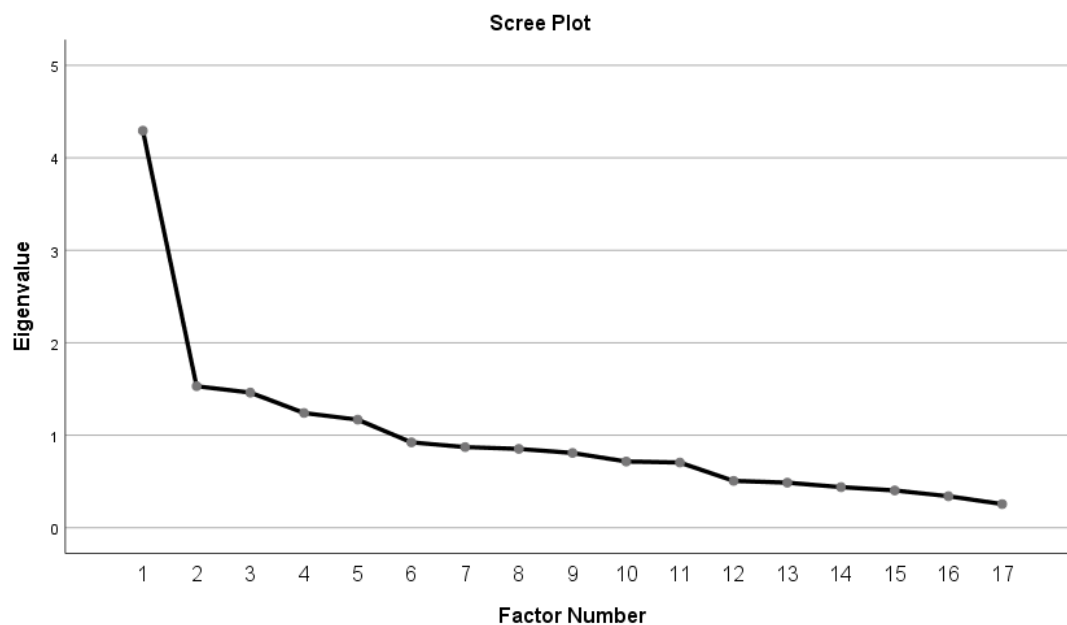
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.293	25.254	25.254	3.670	21.587	21.587	3.171
2	1.530	9.000	34.254	.871	5.122	26.708	2.347
3	1.461	8.593	42.848	.756	4.445	31.153	2.078
4	1.240	7.296	50.143				
5	1.169	6.877	57.020				
6	.923	5.430	62.450				
7	.872	5.130	67.580				
8	.852	5.011	72.591				
9	.808	4.754	77.346				
10	.716	4.211	81.557				
11	.705	4.145	85.702				

12	.506	2.977	88.679				
13	.487	2.863	91.542				
14	.439	2.582	94.125				
15	.403	2.370	96.494				
16	.340	2.002	98.496				
17	.256	1.504	100.000				

Extraction Method: Principal Axis Factoring.

- a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 7: Scree plot



Based on the variables that load highly to Factors 1, 2 and 3, the following themes have emerged to help explain what each factor related to.

Factor	Description	Constituent variables
1	Improve entrepreneurial knowledge	• Attending industry events • Reading books/articles • Using online resources • Broad network engagement
2	Motivate and recharge	• Relaxation • Family time • Mentor/mentee relationship • Attend motivational talks • Previous business ventures
3	Improve general knowledge	• Complete university degree • Engagement with new people • Track current affairs • Complete a short course

Reliability testing

The analysis began with 17 variables that represented activities that entrepreneurs engage in within their personal capacity. After the factor analysis was run, three of these variables were removed and the remaining variables mapped into one of the three retained factors. A reliability test was then run on each factor and its constituent variables. In particular, a Cronbach Alpha was derived for each factor to measure its internal consistency, that is how closely related the set of constituent variables are as a group.

Table 8: Summary of reliability statistics

Factor	Cronbach's Alpha	N of Items
Factor 1 – Improve entrepreneurial knowledge	.733	5
Factor 2 – Motivate and recharge yourself	.670	5
Factor 3 – Improve general knowledge	.495	4

Cronbach Alphas that exceed 0.7 are considered acceptable. The alpha coefficients for the five variables in Factors 1 and 2 are 0.733 and 0.670 respectively. This suggests that the variables within these factors have relatively high internal consistency. Conversely, the alpha coefficient of the four variables in Factor 3 is relatively lower at 0.495.

Regression analysis

In order to test the hypothesis that the derived factors will have a significant and positive predictive capacity on business success, a regression analysis was conducted. In particular a multiple linear regression analysis was selected as a suitable regression technique for the following reasons:

1. The dependent variables were measured on a continuous scale;
2. The independent variables were measured on an ordinal scale; and
3. The data is largely normal in nature when assessing the Q-Q plots, although fails when conducting the Shapiro-Wilk test for normality, as the significance levels are below 0.05 (as reflected below in Table 9).

Table 9: Tests of normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
F1_Develop_entrepreneurial_knowledge	.113	83	.011	.967	83	.031
F2_Motivate_and_recharge	.161	83	.000	.928	83	.000
F3_Develop_general_knowledge	.144	83	.000	.954	83	.005

a. Lilliefors Significance Correction

Predictive capacity of the derived factors on business success as measured by Sales Growth

In running a regression to assess the predicative ability of the derived factors on business success as reflected by Sales growth, the value of R^2 is 0.172, which implies that 17.2% of the total variance in business success can be explained by the factors. Although this is not a high level of variance and is

generally indicative of a poor quality of fit, it is not uncommon for social survey data to yield poor predictive results (European Social Survey Education Net, 2013).

Table 10: Model summary

Model	R	R-Square	Adj. R-Square	Std. Error of Estimate	R-square change	F change	df1	df2	Sig. F change	Burbin-Watson
1	.415 ^a	.172	.141	87750.164%	.172	5.487	3	79	.002	2.083

- a. Predictors: (constant), F3_Develop_general_knowledge, F1_Develop_entrepreneurial_knowledge, F2_Motivate_and_recharge
b. Dependent variable: Sales growth

The significance of the model of 0.02, as shown below in Table 11, is less than 0.05. Therefore, the null hypothesis that all the model coefficients is 0, is rejected. Instead the model should be adopted as it accounts for significantly more variance in business success than would be expected by chance.

Table 11: Anova

	Model	Sum of Squares	df	Mean square	F	Sig.
1	Regression	1.268E+11	3	4.225E+10	5.487	.002 ^b
	Residual	6.083E+11	79	7700091317		
	Total	7.351E+11	82			

- a. Dependent variable: Sales growth
b. Predictors: (constant), Predictors: (constant), F3_Develop_general_knowledge, F1_Develop_entrepreneurial_knowledge, F2_Motivate_and_recharge

The beta coefficients indicate that all factors have a positive relationship with business success, that is, entrepreneurs who engage more in developing their entrepreneurial knowledge, motivating and recharging themselves and developing their general knowledge, are likely to enhance their business success. Such relationships are as per those hypothesised. However, in assessing the p-value and test statistic for each predictor, it is evidenced that, of the factors, only F2_Motivate and recharge has a statistically significant relationship with Sales growth.

Table 12: Coefficients

	Model	Unstandardized B	Coefficient Std. Error	Standardised coefficients Beta	T	Sig.
1	Constant	-166811.869	48487.377		-3.440	.001
	F1_Develop_entrepreneurial_knowledge	13957.170	14263.940	.115	.978	.331
	F2_Motivate_and_recharge	44703.441	19638.101	.292	2.399	.019
	F3_Develop_general_knowledge	19674.897	16319.076	.132	1.206	.232

- a. Dependent variable: Sales growth

Therefore, it can be concluded that F2_Motivate and recharge is significantly positively related to business success as represented by sales growth.

Predictive capacity of the derived factors on business success as measured by Number of Years in Operation

In running a regression to assess the predicative ability of the derived factors on business success as reflected by Number of years in operation, the value of R^2 is 0.634, which implies that 63.4% of the total variance in business success can be explained by the factors. This indicates that the model has a relatively good fit to the data.

Table 13: Model summary

Model	R	R-Square	Adj. R-Square	Std. Error of Estimate	R-square change	F change	df1	df2	Sig. F change	Burbin-Watson
1	.796 ^a	.634	.620	5.567	.634	45.688	3	79	.000	1.793

- a. Predictors: (constant), F3_Develop_general_knowledge, F1_Develop_entrepreneurial_knowledge, F2_Motivate_and_recharge
b. Dependent variable: Number of full years that the business has been in operation

The significance of the model of 0.00, as shown below in Table 14, is less than 0.05. Therefore, the null hypothesis that all the model coefficients is 0, is rejected. Instead the model should be adopted as it accounts for significantly more variance in business success than would be expected by chance.

Table 14: Anova

	Model	Sum of Squares	df	Mean square	F	Sig.
1	Regression	4247.974	3	1415.991	45.688	.000 ^b
	Residual	2448.412	79	30.993		
	Total	6696.386	82			

- a. Dependent variable: Number of full years that the business has been in operation
b. Predictors: (constant), Predictors: (constant), F3_Develop_general_knowledge, F1_Develop_entrepreneurial_knowledge, F2_Motivate_and_recharge

The beta coefficients indicate that all factors have a positive relationship with business success, that is, entrepreneurs who engage more in developing their entrepreneurial knowledge, motivating and recharging themselves and developing their general knowledge, are likely to enhance their business success. Such relationships are as per those hypothesised. However, in assessing the p-value and test statistic for each predictor, it is evidenced that, of the factors, F2_Motivate and recharge and F3_Develop general knowledge have a statistically significant relationship with Number of years of operation.

Table 15: Coefficients

Model	Unstandardized B	Coefficient Std. Error	Standardised coefficients Beta	T	Sig.
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1	Constant	-22.029	3.076		-7.161	.000
	F1_Develop_entrepreneurial_knowledge	.244	.905	.021	.270	.788
	F2_Motivate_and_recharge	10.299	1.182	.681	8.710	.000
	F3_Develop_general_knowledge	3.308	1.035	.233	3.195	.002

a. Dependent variable: Number of full years that the business has been in operation

Therefore, it can be concluded that F2_Motivate and recharge and F3_Develop general knowledge, are significantly positively related to business success as represented by number of years that the business has been in operation for.

Predictive capacity of the derived factors on business success as measured by Growth in Workforce

In running a regression to assess the predicative ability of the derived factors on business success as reflected by Growth in workforce, the value of R^2 is 0.125, which implies that 12.5% of the total variance in business success can be explained by the factors. This indicates that the model has a relatively poor fit to the data. As mentioned previously, such results are not uncommon for social survey data.

Table 16: Model summary

Model	R	R-Square	Adj. R-Square	Std. Error of Estimate	R-square change	F change	df1	df2	Sig. F change	Burbin-Watson
1	.354 ^a	.125	.092	2952.36289%	.125	3.766	3	79	.014	2.002

a. Predictors: (constant), F3_Develop_general_knowledge, F1_Develop_entrepreneurial_knowledge, F2_Motivate_and_recharge

b. Dependent variable: Growth in workforce

The significance of the model of 0.014, as shown below in Table 17, is less than 0.05. Therefore, the null hypothesis that all the model coefficients is 0, is rejected. Instead the model should be adopted as it accounts for significantly more variance in business success than would be expected by chance.

Table 17: Anova

	Model	Sum of Squares	df	Mean square	F	Sig.
1	Regression	98475517.97	3	32825172.66	3.766	.014 ^b
	Residual	688599282.6	79	8716446.616		
	Total	78704800.6	82			

a. Dependent variable: Growth in workforce

b. Predictors: (constant), Predictors: (constant), F3_Develop_general_knowledge, F1_Develop_entrepreneurial_knowledge, F2_Motivate_and_recharge

The beta coefficients indicate that all factors have a positive relationship with business success, that is, entrepreneurs who engage more in developing their entrepreneurial knowledge, motivating and recharging themselves and developing their general knowledge, are likely to enhance their business success. Such relationships are as per those hypothesised. However, in assessing the p-value and test statistic for each predictor, it is evidenced that, of the factors, only F3_Develop general knowledge has a statistically significant relationship with Growth in workforce.

Table 18: Coefficients

Model		Unstandardized B	Coefficient Std. Error	Standardised coefficients Beta	T	Sig.
1	Constant	-4434.973	1631.363		-2.719	.008
	F1_Develop_entrepreneurial_knowledge	473.276	479.912	.119	.986	.327
	F2_Motivate_and_recharge	537.957	627.078	.104	.858	.394
	F3_Develop_general_knowledge	1154.302	549.057	.237	2.102	.039

a. Dependent variable: Growth in workforce

Therefore, it can be concluded that F3_Develop general knowledge is significantly positively related to business success as represented by the growth in workforce.

Conclusion

Summary of findings

This study has aimed to address the hypothesis of whether factors, composed of activities that entrepreneurs engage in within their personal capacity, have a statistically positive relationship with business success, as measured by sales growth, number of years of operation of the business and growth in workforce, respectively.

A factor analysis was performed on the initial list of 17 activities that entrepreneurs engage in within their personal capacity, in order to determine if these could be summarised into a concise list of factors. Using PAF and promax rotation, three factors were retained that are summarised below in Table 19.

Table 19: Summary of results

Factor	Constituent variables	Internal consistency	Relationship with business success	
Factor 1 – Improve entrepreneurial knowledge	- Attending industry events - Reading books/articles - Using online resources - Broad network engagement	High	Sales growth	- Positive - Statistically insignificant
			Number of years in operation	- Positive - Statistically insignificant
			Growth in workforce	- Positive - Statistically insignificant
Factor 2 – Motivate and recharge	- Relaxation - Family time - Mentor/mentee relationship - Attend motivational talks - Previous business ventures	High	Sales growth	- Positive - Statistically significant
			Number of years in operation	- Positive - Statistically significant
			Growth in workforce	- Positive - Statistically insignificant
Factor 3 – Improve general knowledge	- Complete university degree - Engagement with new people - Track current affairs - Complete a short course	Low	Sales growth	- Positive - Statistically insignificant
			Number of years in operation	- Positive - Statistically significant
			Growth in workforce	- Positive - Statistically significant

The results indicate that the composite factors F1_Improve entrepreneurial knowledge and F2_Motivate and recharge, are comprised of variables that are more closely related than those of F3_Improve general knowledge.

When regressing each derived factor on business success, F2_Motivate and recharge and F3_Improve general knowledge were the only to maintain a statistically significant and positive relationship with overall business success.

Staying motivated and recharging oneself is directly linked to optimism which is the general expectancy of good outcomes. Entrepreneurial literature is aligned in suggesting that optimism drives a greater internal locus of control and the continued pursuit of achieving goals, whereas pessimism is associated with giving up. This drive is due to the desirable outcomes of optimism including, amongst others, happiness, perseverance, health and overall achievement (Peterson, 2000).

Lillian Vernon (1996), the founder of a billion-dollar enterprise, Lillian Vernon Corporation has emphasised that errors and setbacks are part of the entrepreneurial experience and that unless an entrepreneur is able to stay encouraged and learn from their mistakes, they are unlikely to be successful. This was supported by Stephen Covey (1999), businessman and leadership expert. Furthermore, the concept of optimism was examined by Wunderley, Reddy and Dember (1998). Through the use of Leadership Practices, the Kirton Adaption-Innovation Inventory and measures of optimism and pessimism, they were able to conclude that optimistic leaders leveraged better leadership practices and displayed higher levels of adaptability and innovation. Therefore, motivating and recharging oneself, not only leads to business success, but broader leadership success.

Such results were largely supported by those of Balven, Fenters, Siegel & Waldman (2018) who focused on understanding the relationship of various micro-processes on academic entrepreneurship. Various processes were included in the study including identity, motivation, leadership/championing, education, work-life balance and organisational justice. Generally, all processes were concluded to positively influence academic entrepreneurship. Many of these factors align with the constituents of the composite factor F2_Motivate and recharge, thereby corroborating the results of this study.

The results are also aligned to other studies, including that of Sekliuckiene (2015). In the study, the importance of collaboration and networks in international entrepreneurship was assessed. Partnerships with universities and innovation centres were highlighted to be critical for entrepreneurial expansion, driven primarily by the knowledge, infrastructure and technical assistance that such entities could provide to the entrepreneur.

Within the context of a developing nation like South Africa, the statistical significance of F2_Motivate and recharge and F3_Improve general knowledge, make intuitive sense.

Entrepreneurs in developing nations are challenged by restrictive government policy, limited access to financing, driven primarily by slow economic growth, and a lack of formalised entrepreneurial education and training (Crampton, 2016). When considering these impeding factors, it is apparent that to both initiate an entrepreneurial endeavour and sustain it over the long term can be a

challenging feat. Therefore, maintaining an inspired and energised attitude can help influence new thoughts, ideas or behaviours that culminate towards the achievement of business success (Thrash & Elliot, 2003). In the absence of structured entrepreneurial learning and development, entrepreneurs that seek to broaden their knowledge through other avenues are able to enhance their business success. This is because entrepreneurial learning comprises both practical (learning gained through entrepreneurial experiences and business simulations) and theoretical (learning gained through external sources including people or academia) elements (Souitaris, Zerbini, & Al-Laham, 2007; Johannisson, 1991).

Limitations

This study is exploratory in nature and considered to add to the ongoing research in the field of optimising survival of entrepreneurs. It is subject to various limitations with the expectation that future studies improve on and mitigate these where possible.

Firstly, the sample population for the sake of convenience in accessing entrepreneurs is concentrated to the Gauteng and Kwa-Zulu Natal regions with few respondents located in the Western Cape and other parts of South Africa. For future studies on related topics it is recommended that a larger sample of entrepreneurs across South Africa be used in order to ensure more representative data.

Secondly, due to the limited experience and knowledge of less established or more informal businesses, the full range of envisaged variables may not have been identified through engagement with the entrepreneurs. In this way the full range of envisaged factors will be unable to be explored.

Thirdly, the entrepreneurs operate in different industries and as a result may inherently be required to participate in more or less activities in their personal capacity. For instance, an entrepreneur operating in the technology space would need to attend more events to enhance their knowledge of current trends whereas an entrepreneur who owns a supermarket or grocery store may not be required to do so. The descriptive element of the study will intend to differentiate for this and understand how certain types of businesses are pre-disposed to success due to less complex operations. Further studies should apply similar descriptive elements or narrow the population to certain industries for more conclusive results.

Fourthly, due to schedule constraints many entrepreneurs may be negligent and not apply their minds in answering the survey and as such may submit responses that are not reflective of reality. Lastly, future studies can expand on the dimensions of factors examined in this study and attempt to include activities that were not considered.

Concluding remarks

Entrepreneurship is of great importance in South Africa to drive employment and economic growth. However, entrepreneurs are challenged in making their business endeavours successful beyond the fledgling years.

This study has found that maintaining motivation and work-life balance and improving general knowledge are key activities that entrepreneurs can engage in, to enhance their overall business success. Focusing on these factors, rather than singular focus on improving entrepreneurial

knowledge, can be more rewarding to entrepreneurs. Additionally, funders and investors can encourage these practices to ensure that their business interests are successful.

Irrespective of business type and field of operation, entrepreneurs need to ensure that they go beyond the ordinary course of business in order to succeed. Entrepreneurship is a lifestyle, therefore requiring that entrepreneurs take their holistic and integrated development into account, in order to ensure their business success.

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