

Women entrepreneurship in South Africa: Understanding the role of competencies in

business success



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Background and aim: Environmental factors alone cannot determine the success of small, medium and micro-sized enterprises (SMMEs) and female entrepreneurs; there is a need to closely examine the internal factors that also contribute to business success. This is necessary because, despite the considerable government support and support of bodies interested in promoting gender equality in all areas (business included), 20% of female-owned businesses still fail annually. Consequently, even though, according to a report from the Department of Trade and Industry in South Africa, millions of Rands have been allocated to support femaleowned SMMEs by way of government funding, training, grants and consultative support services, the failure rates of these female-owned businesses remain high. The main reason for this can be that over-dependence on these incentives often weakens rather than strengthens female entrepreneurs' ability to manage their businesses and reduces their competitiveness by laying emphasis on external, contextual factors rather than internal, competence variables for success. Researchers in the past have suggested that focusing on the internal factors, especially the 'people issues' facing the entrepreneurs (in this case female entrepreneurs), may give the business a better chance of success.

Design/methodology/approach: A 'mixed-method' approach, conducted in two parts, was adopted for this study and appropriate tools and techniques were used to collect and analyse the data drawn from a sample of female entrepreneurs in South Africa. The study applies culturally instantiated facets of the debate on gender entrepreneurship as part of a detailed and empirically sophisticated consideration of the status of female entrepreneurship within South Africa. The qualitative aspect utilised semi-structured interviews and focus group discussions. The quantitative aspect utilised survey questionnaires developed from the findings of the qualitative study.

Results: All participants agreed that entrepreneurial competencies are vital for business success. The study also makes a clear distinction between the traits approach and competencies approach in understanding business success. Arguably, the competency variable is viewed and appreciated differently by female entrepreneurs in South Africa. The findings also showed some cultural variations in the application of entrepreneurial competencies among the four dominant racial groups in South Africa.

Conclusion: This study offers a comprehensive analysis of the competency variable in understanding the factors that influence business success in the context of South African female entrepreneurs. It provides a basis for an agenda for focus on training and development of the entrepreneurial competencies of female entrepreneurs in South Africa.

Introduction

Small, medium and micro-sized enterprises (SMMEs) are a vital part of the macroeconomic growth in the developing world. Because the success of SMMEs is arguably more dependent upon the owner's capabilities than is the case with larger enterprises, it is therefore important to develop competencies among entrepreneurs to give the SMMEs (or micro, small and medium enterprises, MSMEs, as they are sometimes called) a sustainable competitive advantage (Mitchelmore & Rowley 2013). Irene (2016) affirms this position, arguing that the competencies of the owner-manager in SMMEs are 'individually specific', whereas larger firms are 'organisationally indexed'. Effectively, this means that the competencies of the entrepreneur-manager of SMMEs can be assumed as the firm's competencies, thereby allowing the focus of this study to be on the individual entrepreneur as the unit of analysis.

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Previous researchers identified two types of entrepreneurs: opportunity entrepreneurs and necessity entrepreneurs. Opportunity entrepreneurs are those who discover or identify an opportunity or gap in the marketplace and embark on the entrepreneurial journey to fill that gap (Botha, Nieman & Van Vuuren 2007). By contrast, necessity entrepreneurs embark on the journey out of a need to survive because of a lack of employment, have reached the peak of their careers (glass ceiling) or lack the necessary qualifications to work for other firms. Turton and Herrington (2012) report on South African entrepreneurship highlights the gender divide between these two types of entrepreneurship, indicating that men are more often 'opportunity' entrepreneurs and women are more often 'necessity' entrepreneurs. Given that 'necessity', rather than 'opportunity' has been identified as the main reason for women venturing into business ownership in South Africa, it can, therefore, be deduced that many women embark on the entrepreneurial journey illprepared, with little understanding of the intricacies of business operation and management and possessing few or no skills and competencies. Entrepreneurship in South Africa is affected by a number of factors like race, gender and location. The statistics on gender in the economy exposes differences between women and men. Because of limited opportunities in the formal employment sector, many women, are left with no option but to work in the poorly paid and mostly unregulated informal sector. Access to resources and the control of resources is still based on race, gender and class. South Africa therefore remains characterised by extreme poverty, social disintegration and mass unemployment with the majority of people excluded from socio-economic development and growth (Kehler 2013).

According to the 2014 Global Entrepreneurship report for South Africa, female entrepreneurship could be the key to unlocking South African economic growth if more effort is made to support female entrepreneurs in a targeted way. The report maintains that an important way to develop the South African economy is to encourage and improve female self-employment as well as to pursue intervention programmes that are aimed at increasing female participation in business. According to the study, female entrepreneurs are easier to finance and less risky than their male counterparts; female-owned businesses could have a lower business failure rate and create more jobs compared to their male counterparts. Despite this, male entrepreneurs are 1.7 times more likely to be involved in early-stage entrepreneurship or become developed business managers than women (which is higher than the global average of 1.6 times). The 2014 Total Entrepreneurship Activity (TEA) rate for men was 8.1%, while it is 4.9% for women. This difference could be attributed to the fact that men are more 'opportunity' than 'necessity' entrepreneurs. The overall TEA rate of South Africa is lower than the other BRICS countries (Brazil, Russia, India, China and South Africa), which could be because of the fact that many South Africans (men and women) do not believe they have the skills required for venture start-up (GEM 2014). The report also concludes that South Africa has the lowest rate of new and established

firms, thereby suggesting that the contribution of the entrepreneurial sector is below the norm for other developing countries. This can be improved considerably by developing the female entrepreneurial market.

The intervention of the government and NGOs in gender entrepreneurship has had little effect on female entrepreneurial success, as the failure only went down by 2.9% according to GEM (2014) report. This, therefore, raises the need to conduct research into the factors that affect the success or failure of enterprises by focusing on competencies, culture and gender differences rather than focusing on the barriers and challenges that they face (which has been the focus thus far). The findings from the studies of Irene (2016) and Botha (2006) have highlighted two competing understandings of potential entrepreneurial success regarding individual capabilities: the traits approach (arguing that entrepreneurial traits are innate) and the competency approach (arguing that successful entrepreneurship is an acquired skill). This paper endeavours to close the gap in the existing literature on entrepreneurial competencies by exploring the applicability of the comprehensive model of entrepreneurial competencies and examining its relationship to business success in the context of South African female entrepreneurs. By focusing on the female entrepreneur as the unit of analysis for this study, the paper highlights salient behaviours that delineate competencies for women entrepreneurs, given that studies have shown that behavioural differences exist between men and women.

Literature review

Entrepreneurs are portrayed as people that are 'very passionate about what they do' (Shefsky 2011) and are 'willing to take risks' so that their dreams can be transformed into realities. They have been described as a person adept to bring about change, who is not afraid to do things differently, who goes in search of new opportunities and exploits them and converts new thoughts into actuality. The descriptions of entrepreneurs are varied and spread from a broad criteria (i.e. start-ups) to a more defined criteria (risk management, doggedly turning ideas into reality and achieving set goals, innovative). The most common attribute for the entrepreneur is new venture creation; however, some researchers argue that an entrepreneur is more than just a new venture creator, but someone who is innovative, employing strategic management practices to ensure business growth and survival. To this end, Miskin and Rose (2015) portray entrepreneurs as the inventors of an 'innovative' economic organisation for the purpose of gain and growth under conditions of risk and uncertainty.

To establish the factors that determine business success in SMEs, some researchers have undertaken to study the behaviour of the entrepreneur by examining the managerial work of successful leaders. This has been approached through two broad themes. The first is the trait approach, which focuses on personality trait profiling of the entrepreneur (Entrialgo et al. 2001; Rauch and Frese 2007), and the second

is the competency approach, which is focused on the competencies of the individual entrepreneur (Chell 2013; Santandreu-Mascarell, Garzon & Knorr 2013; Tan & Tan 2012; Thongpoon, Ahmad & Yahya 2012). The focus of this paper is the competency approach and it is discussed further below.

The competency approach

There is no consensus on the definition of the word 'competency', which has led to confusion about the meaning of the concept of competencies (Irene 2016). The most common argument relates to the differences between 'competency' and 'competence'. Both terms are often used interchangeably, even though they are two distinct concepts by different scholars.

Rowe (1995), for example, defined 'competence' as a skill or standard of performance and argues that 'competency' refers to a behaviour that results in performance being achieved. Hoffmann (1999), from his extensive review of the various meanings attributed to competencies, concluded that there are three different definitions for competencies: (1) observable performance, (2) the standard of the outcome, or result, of a person's performance and (3) the underlying attributes of a person, such as their knowledge, skills and abilities.

The meanings that have been given to the concept of competency have been drawn from literature on management and entrepreneurship and are based on the use of the concept in either a broad or specified manner as illustrated below.

There are four features of competencies that are constant from the definitions above:

- Competencies comprise the complete characteristics of the individual that correlate with the actual performance of a particular job or task.
- Competencies are revealed in the individual's behaviour; consequently, they can be observed and measured.
- Competencies enable the achievement of goals and objectives.
- Competencies are resources in any organisation and they can be adopted or cultivated.

TABLE 1: Definitions of competencies.

Researcher	Definition
Boyatzis (1982)	'Underlying characteristics of a person in that it may be a motive, trait, skill, aspects of one's self-image or social role or a body of knowledge which he or she uses' (p. 21).
Brophy and Kiely (2002)	'Skills, knowledge, behavior and attitudes required to perform a role effectively' (p. 167).
Parry (1998)	'A cluster of related knowledge, attitudes, and skills that: (1) affects a major part of one's job, (2) correlates with performance on the job, (3) can be improved by training and development' (p. 60).
Tett et al. (2000)	'An identified aspect of prospective work behavior attributable to the individual' (p. 215).
Thompson, Stuart and Lindsay (1997)	'Integrated set of behavior which can be directed towards successful goal accomplishment' (p. 52).
Woodruffe (1993)	'The set of behavior patterns that the incumbent needs to bring to a position in order to perform its task and functions with competence' (p. 17).

Source: Irene, B., 2016, Gender and entrepreneurial success: A cross cultural study of competencies of female SMEs operators in South Africa, PhD Thesis, Cardiff Metropolitan University

In line with the above definitions, Bird (1995), Burgoyne (1993) and Parry (1998) all agree that utilising the competency approach to understanding business success provides a possible approach to intervention. In a study conducted by Wallace (1998) on the impact of small business courses on competencies, it was discovered that training programmes for entrepreneurs could indeed help them develop entrepreneurial competencies. According to McClelland (1973), when considering the provision of an intervention, the competency approach is vital because it is able to reduce the bias in the traditional personality traits approach. Despite the advantages of this approach, however, a caveat to the general endorsement of the competency model of the entrepreneurial success has been identified (Sadler-Smith et al. 2003). They point out that research so far does not distinguish between entrepreneurial competencies and managerial competencies. Therefore, identifying the specific entrepreneurial competency requirements is still an important task.

The definition of entrepreneurial competencies used in this paper is that of Noor (2007:22), which describes competencies as 'individual characteristics that include both attitudes and behaviours, enabling the entrepreneur to achieve and maintain business success'. A major challenge in measuring non-behavioural elements is the fact that internal elements, such as the need to achieve, self-efficacy and risk-taking propensities, are difficult to observe and have to be measured through self-reporting, introspection and inference (from the entrepreneur's behaviour).

This study is an extension of Man (2001) study, the study of Noor (2007) and that of Mitchelmore and Rowley (2013); therefore, the behaviours that reflected the 12 competency domains remain the focus. The competency domains identified by Man (2001) and validated by other researchers were as follows: (1) 'Strategic', (2) 'Commitment', (3) 'Conceptual', (4) 'Opportunity', (5) 'organising and leading', (6) 'relationship', (7) 'learning', (8) 'personal' and (9) 'technical'. Additional competency domains identified by Noor (2007) and Mitchelmore and Rowley (2013) are (10) 'ethics', (11) 'social responsibility' and (12) 'familism'.

Exploring business success in female-owned and managed small, medium and micro-sized enterprises

There is a lack of agreement over what comprises the best measure for business success. Some researchers advocate the use of only financial indicators, such as profitability, turnover and return on investment (ROI) as measures of business success. Others, such as Ramana, Raman and Aryasri (2009), posit that entrepreneurial success can be measured financially and non-financially. To this end, in their study of the influence of socio-demographic factors on entrepreneurship, they used growth in total sales and employment as financial measurements, while work experience and competencies were used as non-financial measurements.

According to Ahmad, Wilson and Kummerow (2011), the motivation for some SMMEs do not include job provision (only the need to provide for the immediate family); therefore, business growth is not a vital factor for these entrepreneurs. Also, most SMMEs do not have financial statements and accurate records; business success is consequently measured by self-reporting and perceptions (Ahmad et al. 2010). This view is also held by other researchers, such as Beaver and Jennings (2005), who argue in favor of using non-financial indicators in measuring business success, because, according to them

Contrary to popular belief and a great deal of economic theory, money and the pursuit of personal financial fortune are not as significant as the desire for personal involvement, responsibility and the independent quality and life-style which many small business owner-mangers strive to achieve. Consequently, the attainment of these objectives becomes one of the principal criteria for success, as defined by the entrepreneur/owner-manager.

While financial success affords business sustainability and growth, non-financial indicators, such as achievement, accomplishments and attainment of personal goals and objectives, are factors to be considered, according to Walker and Brown (2004). They have gone on to propose some relevant non-financial indicators such as job satisfaction, greater independence, opportunities creation and encouraging new challenges and the pursuit of personal interest. These factors have also been previously identified as entrepreneurial motivational factors for women.

Given the arguments above, both financial and non-financial factors are used in this study to measure success in female-owned and managed SMEs in South Africa. Therefore, in this study, financial indicators such as turnover (sales), growth (sales), ROI and market share are used for the purpose of measuring the success of female entrepreneurs operating in the context of SMEs in South Africa. The non-financial indicators here (based on the work of the aforementioned scholars) are customer satisfaction, retention, the entrepreneur's satisfaction, reputation and goodwill of the business, employee satisfaction and good working environment or relations.

The choice of customer satisfaction and retention as a nonfinancial indicator for measuring business success is based on the views of Adams and Sykes (2003), who indicate that customer satisfaction and goodwill are linked to customer loyalty, which impacts customer retention and consequently profitability.

Methodology

This study contributes to the current debate on the entrepreneurial competencies literature by investigating competencies that are perceived as important to the success of women operating in the context of SMEs. The aim of this research is to examine the innate and acquired competencies of female entrepreneurs in South Africa with a view to differentiating the behavioural and non-behavioural elements of competency, which will further lead to the

identification and exploration of competency clusters and the associated behavioural pattern.

The methodological framework proposed for this study is largely based on a positivist and realist approach to research. The researcher assumes that what exists in the social world is real and can be largely measured and described just as physical scientists measure and describe the physical world. According to Lin (1998), positivists seek to identify details with propositions that can be tested by identifying causal relationships present in a data set with some degree of probability. The positivist approach involves trying to decipher which pieces of information in the data sets are associated and then assesses the strength of the association by counterfactual thinking and problems of reliability and representativeness. However, positivism cannot easily explain how the mechanism implied by the causal relationship works or interacts. Interpretive works, on the other hand, can produce detailed examinations of causal mechanisms in specific cases and explains how particular variables interact. The combination of both modes of logic adds more functional content, which neither positivism nor interpretivism can produce alone and gives more additional confidence to our conclusions.

The sample for this study was drawn from a population of female business owners across four provinces - Western Cape, Gauteng, KwaZulu-Natal and Northern Cape. The sampling method for the qualitative aspect of this study was purposive with the initial 50 interviews conducted using open-ended questionnaires that comprised six parts. The findings from these interviews were collated and used to formulate the questions for the focus group discussions. Ten focus group discussions involving six to eight participants per session were then undertaken over an 8-month period. The findings from the qualitative study were then used to develop an eight-part questionnaire for the quantification study. The sampling method for the quantitative study was the simple random selection and it utilised a 5-point Likert scale questionnaire in which participants were required to (1) Highly Disagree, (2) Disagree, (3) Neither disagree nor agree, (4) Agree and (5) Highly Agree. In all, 1200 questionnaires were distributed and 785 usable responses were received. Both the qualitative and quantitative aspects involved 1075 female business owners.

Data collection and analysis

The method of data collection for the research elements of this study was mostly based on communication by means of face-to-face interaction with participants. Personal interviews were conducted with female entrepreneurs over a period of 5 months, after which focus group discussions were conducted. The information gathered from these interviews and discussions were then used to formulate the questionnaire used for the quantitative study. Samples for the quantification study were randomly selected by means of simple random sampling. This method was considered appropriate for this study, given that simple random

sampling allows for statistical analysis to be conducted on the samples and, because of its representativeness (it provides an equal opportunity for every member of the population to be selected), generalisations can be made from the results of the sample back to the population. While some of the respondents belonged to various business networks and association, a significant number (480) did not belong to any network. The secondary data were obtained from the review of the literature.

Given that the data collected in this current study comprised both qualitative and quantitative data, the analysis of the data was also done qualitatively and quantitatively. The qualitative data were tape-recorded and transcribed by professional transcribers in order to ensure accuracy and precision of the transcript. The quantitative data were captured into SPSS 12.0.1 software. Thematic analysis was conducted on the qualitative data, while regression was done on the quantitative data by building a one-factor congeneric model.¹

Reliability and validity assessment

Cronbach's alpha was computed for each of the factors (a one-factor congeneric model was built for each of the 12 competency domains) in order to ascertain the internal consistencies of the constructs. The scales from this study were similar to those reported by Morris et al. (2013); therefore, a value of > 0.70 is considered to be good, while a value of > 0.60 is considered to be acceptable. Substantial and significant factor loadings can provide evidence of convergent validity with a value of > 0.50 considered as the recommended value. Table 2 shows that all the 12 competencies' loadings were significant and well above the recommended value of > 0.50. The opportunity competency and the social responsibility competency displayed the recommended value of > 0.50, while the strategic competency and organising and leading competency displayed a high value of > 0.80. These results show that from the 100 items used to measure 12 factors (entrepreneurial competency domains) on a 5-point Likert scale, the derived factors delivered a good Cronbach's alpha result.

Four dimensions of business success measurement were adopted for this study, comprising both financial and non-financial indicators. All dimensions for the business success construct were subjected to the measurement process such as the one adopted for entrepreneurial competencies and scales derived were similar to those of Noor (2007) and Morris et al. (2013). The correlations between all four dimensions of business success and entrepreneurial competencies were scrutinised separately, and there proved to be a strong correlation among all dimensions for business success and entrepreneurial competencies. As shown in Table 2, all the dimensions of

the business success construct showed a strong internal consistency of > 0.80. This shows that all the dimensions for the business success construct can be considered reliable and valid (See Appendix 1- Table 1-A1).

To examine the interrelationships among all the variables in this study, a correlation analysis was undertaken. This showed a strong positive correlation among all 12 competency domains (p < 0.01). It also showed a link between the competency domains and the four business success dimensions except in the case of social responsibility, which showed a negative correlation with two of the business success constructs (such as performance relative to competitors and business growth). The strongest correlations, however, were found between the learning and organising competency and the leading, conceptual and strategic competencies (see Table 3).

TABLE 2: Reliability analysis.

Variable		ents (785 Female preneurs)
	Valid Cases	Cronbach's Alpha
Learning competency	782	0.7347
Social responsibility competency	781	0.5181
Ethical competency	781	0.6848
Familism competency	782	0.6050
Technical competency	782	0.7727
Personal competency	784	0.7198
Relationship competency	784	0.7459
Organising and leading competency	785	0.8365
Opportunity competency	784	0.5105
Conceptual competency	782	0.7894
Commitment competency	782	0.6461
Strategic competency	781	0.8112
Satisfaction with financial performance	767	0.8087
Satisfaction with non-financial performance	769	0.8325
Performance relative to competitors	779	0.8599
Business growth	779	0.8585

Source: Irene, B., 2016, Gender and entrepreneurial success: A cross cultural study of competencies of female SMEs operators in South Africa, PhD Thesis, Cardiff Metropolitan University

 TABLE 3: Correlations of entrepreneurial competencies and business success.

Variable	p
Learning competency	0.039249
Social responsibility competency	0.045043
Ethical competency	0.028906
Familism competency	0.061354
Technical competency	0.044379
Personal competency	0.073391
Relationship competency	0.074531
Organising and leading competency	0.064611
Opportunity competency	0.049351
Conceptual competency	0.077900
Commitment competency	0.091659
Strategic competency	0.037051
Satisfaction with financial performance	0.123029
Satisfaction with non-financial performance	0.102483
Performance relative to competitors	0.021832
Business growth	0.050538

Source: Irene, B., 2016, Gender and entrepreneurial success: A cross cultural study of competencies of female SMEs operators in South Africa, PhD Thesis, Cardiff Metropolitan University

Note: Marked correlations are significant at p < 0.05000.

^{1.}The fitting of a one-factor congeneric measurement model was to maximise the reliability of the composite scores. For a one-factor congeneric measurement model, the factor score regression coefficients represent the estimated bivariate regression of the factor on all observed indicator variables.

Regression summary for the dependent variable

As shown in Table 4, the entrepreneurial competencies construct was found to have a significant positive relationship with business success operationalised by self-reports of financial and non-financial indicators (four dimensions of measurement). The analysis was done by building a regression model using the results from the computed factor analysis (i.e. entrepreneurial competencies and business success). The model was then fitted using business success as the dependent variable and entrepreneurial competencies as the independent variables. All 12 competency domains had a direct pact with business success with a *p*-value of ≥ 0.000 (p-value is significant at < 0.05). The result shows that the effect of competencies on business success was strongest for business growth with a coefficient of p 0.0001, while it remained the same on all other measures for the business success construct. Based on the results, it can be inferred that there is statistical evidence that entrepreneurial competencies influence business success.

Discussion

The purpose of this paper was to examine the relationship between entrepreneurial competencies and business success in the context of female-owned businesses in South Africa. The analyses of the qualitative data collected identified 817 behaviours associated with entrepreneurial competencies. The behaviours were first grouped under the 12 existing competency domains and showed a degree of cross cultural generalisability. The existing competency domains include strategic, conceptual, commitment, opportunity, organising and leading, relationship, learning, personal, technical, social responsibility, ethical and familism. The qualitative data from this current research provide evidence of the universality of some aspects of entrepreneurial competencies while also generating some evidence of possible cultural or gender undertones or applications of these competencies. It was found that the cultural orientations of the entrepreneurs played a role in the determination of which competency was regarded as important, particularly with regard to the familism competency. It must, however, be emphasised that the purpose of this qualitative study was not to draw a definitive conclusion about the link between business success

and entrepreneurial competencies but rather to incorporate the findings into the modification of the research instruments for the subsequent quantification study.

The findings of this research show that: (1) entrepreneurial competencies frameworks comprise effective portrayals of business behaviour among South African female entrepreneurs; (2) additional clusters of behaviour exist under these existing models of entrepreneurial competencies, which suggests that female entrepreneurs are sensitive to issues relating to integrity; and (3) the elements of 'Familism' highlighted implies that gender and cultural issues do have an influence on the women's entrepreneurship.

Based on the fact that 817 behaviours delineating entrepreneurial competencies were identified in the qualitative study, it was necessary to further consolidate these behaviours prior to integrating them into the measurement scales for entrepreneurial competencies for the quantification study. The process of consolidation involved taking articles considered limited in range or scope as well as those considered too specific and combining them to offer a nonspecific level of behaviour that was reflective of a particular competency domain. Therefore, behaviours such as 'conduct research on a business premise before setting a new branch'; 'conduct research on a potential client before introducing them to a product/service' and 'conduct research on product quality before introducing them to the market', were grouped under a more generic detail 'conduct research before proceeding with an investment'. This helped to reduce the number of new items generated from the interviews and focus group discussions intended to be included in the original scale.

The findings provide knowledge of the impact of entrepreneurial competencies on the success of female SME operators in South Africa and show that those possessing high level of competencies were more likely to impact the success of female-owned businesses. They were also consistent with those of Man (2001) and highlights the important role of the owner-manager in the determination of business success of SMMEs over and above environmental factors. The results support the literature, which suggests

 TABLE 4: Summary of the regression analysis for entrepreneurial competencies and business success

All cultural groups: N = 745 (usable observations) —		Regression summary for	dependent variable:	Business success (competend	cy and business succes	s)
(usable observations) —	β*	Standard error	β	Standard error	t(740)	р
Intercept	-	-	1.0299	0.3112	3.3115	0.0973**
Competency	0.1977	0.0380	0.2062	0.3101	5.1960	0.0000***
Satisfaction with financial performance	0.2010	0.0742	0.0404	0.0674	1.3525	0.0000***
Satisfaction with non-financial performance	0.2748	0.0750	0.0744	0.0696	1.1956	0.0000***
Performance relative to competitors	0.2533	0.0349	0.0638	0.0626	-7.2358	0.0000***
Business growth	0.1758	0.03555	0.0309	0.0372	0.2964	0.0001***

Source: Irene, B., 2016, Gender and entrepreneurial success: A cross cultural study of competencies of female SMEs operators in South Africa, PhD Thesis, Cardiff Metropolitan University R = 0.31862128; $R^2 = 0.10151952$; Adjusted $R^2 = 0.09666287$.

^{**,} statistically insignificant difference; ***, sufficient significant difference (p-value significant at < 0.05)



 $[\]beta^*$, measure of how strongly each predictor variable influences the criterion (dependent) variable; β , refers to the number of standard deviation changes that can be expected in the outcome variable for a 1 standard deviation change in the predictor variable; t(740), measures the size of the difference relative to the variation in the sample data (using 740 usable samples out of 785 responses received).

that entrepreneurs can minimise the negative effect of the business environment by developing adequate skills and capabilities (competencies). In the framework of this research, individual values were projected to have an impact on the ability to develop entrepreneurial competencies.

Although the purpose of this study was not to analyse entrepreneurial motivation for South African women, it is essential to appreciate the reasons behind the decisions of women to engage in entrepreneurial activities. This is because, according to Buttner and Moore (1997), the entrepreneur's motivations have been found to correlate with their measurement of business success. It also correlates with their business strategy. According to McClelland et al. (2005), business owners are known to be moved by 'pull factors' (inner drive) and 'push factors' (outside forces). The 'pull factors' relate to the entrepreneurs desire for independence, to be one's own boss, to pursue a hobby or natural inclination and express one's own creativity, as well as engage in a passion. In contrast, the 'push factors' are associated with elements of necessity, such as forced or early retrenchment or redundancy, inability to secure employment, lack of job satisfaction or poor remuneration.

Conclusions and recommendations

Several important conclusions can be drawn from the findings. Entrepreneurial competencies play a huge role in the success of female entrepreneurs in South Africa. This current study also adds to the growing body of research seeking to establish a link between entrepreneurial competencies and business success. It provides the basis for a model of business success reflecting the realities of entrepreneurial activities by utilising the competency approach, given that the competency approach emphasises the actual behaviour of entrepreneurs concerning technical and managerial undertakings of their businesses. Therefore, the problem of unclear association between entrepreneurial traits and performance was overcome by this study.

Several conclusions could be drawn from the analysis of both the qualitative and quantitative data. Firstly, for the internal consistencies, results and composite measures of reliability for all variables were found to be reliable for all data sets. Secondly, the positive correlation between business success and entrepreneurial competencies indicates that there is a need to focus on the internal variable of competencies in order to better understand business success among female entrepreneurs in South Africa, as focusing only on external variables could be a major drawback in women's entrepreneurship.

Thirdly, although new competency domains were not discovered in this study, new behaviours were identified, pointing towards a need for a feministic model of entrepreneurial competencies. The theoretical and statistical significance of these findings suggests the need for an inclusive model that addresses the concerns of female entrepreneurs. This calls for a robust model of entrepreneurial

competencies that could provide a better understanding of the behaviours that are prevalent and relevant to the activities of female entrepreneurs in South Africa.

Finally, given the link between entrepreneurial competencies and business success, the role of policymakers should perhaps focus on the development of entrepreneurial initiatives relevant to the development of individual skills and behaviours, such as the recognition of opportunities, ability to respond to opportunities, learning, conceptual thinking and effective personal development.

Limitations of this study

This study was not without its limitations and a few are worth mentioned here. Firstly, the source of all measurements for the predictors (competency) and outcome (business success) was the self-report of entrepreneurs. This approach was necessary given the difficulties associated with the independent assessment of each of these variables. Selfreporting is not an uncommon component in studies that examine management behaviours and business ownermanagers (Chandler and Hanks 1994; Man 2001). According to Chandler and Jansen (1992), self-reported competencies are valid when measuring entrepreneurial competencies using a structured rating instrument (e.g. survey) with good reliability (such as the one used in this study). However, future studies could use information from multiple sources (i.e. the entrepreneur and independent sources) to reduce the likelihood of response bias.

Similarly, self-reported financial reports may be problematic and unreliable, as entrepreneurs could rate their individual performance highly and see their business performance as a reflection of their individual performance. However, previous research has shown that managerial assessment of business performance is generally quite consistent with performance data (Noor 2007). Also, several studies have used the same method of measurement used in this current study to examine performance and success in small businesses. This approach does not require sensitive and financial data to be collected because it is not always available to small businesses (McGee and Peterson 2000). Nevertheless, where possible, future studies should assess profit and loss statements for operationalising business success.

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Competing interests

The author declares that she has no financial or personal relationship(s) that may have inappropriately influenced her in writing this article.

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3.8143

3.3781

2.5928 0.3189

0.36832452 0.39255168

0.32275107

2.5383 0.4073 0.3120508

0.4299

0.4798

0.4693

0.4962

4.2299 4.2849 4.2698 4.2617

4.2223

4.1909

4.3490 4.3138 4.2061 4.3121

4.1309

4.3275

Appendix 1

Variable	Learning	Social responsibility	Ethical	Familism	Technical	Personal	Relations	Organising and leading	Opportunity Conceptual	onceptual	Commit	Strategic	Satisfaction with financial performance	Satisfaction with non-financial performance	Performance relative to competitors	Business growth
Learning	1.0000	٠				,		,	,	,	,	,	1			
Social responsibility	0.6163	1.0000		,	,	,				,	,	,				,
Ethical	0.6129	0.4090	1.0000	1		,	,	•	ı	1	1	,	,	,		,
Familism	0.4311	0.3143	0.4043	1.0000	,	,			ı	,	,	,	,	1	1	
Technical	0.7511	0.5535	0.6348	0.4404	1.0000	,	1	,	ı	1	1	,	1	,	1	٠
Personal	0.7081	0.5709	0.6043	0.4498	0.6729	1.0000			ı				,	,	,	
Relationship	0.7910	0.6260	0.5919	0.4760	0.7460	0.6547	1.0000		ı	,	,	,			1	•
Organising and leading	0.7789	0.5687	0.5860	0.5174	0.7231	0.7394	0.7706	1.0000	,							1
Opportunity	0.6438	0.5689	0.5508	0.5225	0.6564	0.5725	0.7414	0.7026	1.0000						,	٠
Conceptual	0.7514	0.5476	0.5545	0.4763	0.7152	0.7374	0.7510	0.8276	0.6626	1.0000	,					
Commitment	0.5798	0.4712	0.5191	0.4797	0.5265	0.6036	0.6128	0.6642	0.5565	0.6820	1.0000	,		·	1	٠
Strategic	0.7162	0.6065	0.5843	0.5635	0.6383	0.6901	0.7093	0.7425	0.6650	0.7220	0.6861	1.0000	,	,	1	٠
Satisfaction with financial performance	0.0254	0.0685	-0.0523	-0.0137	0.1139	0.0195	0.1029	-0.0110	0.0456	-0.0224	-0.1285	-0.0402	1.0000			•
Satisfaction with non-financial performance	0.1754	0.2892	0.1454	0.0285	0.1722	0.1188	0.1610	0.0431	0.0665	0.0959	0.0624	0.1127	0.5299	1.0000		
Performance relative to competitors	0.1874	0.2083	0.1912	0.2411	0.2334	0.1680	0.1795	0.2389	0.2370	0.2144	0.2117	0.2948	0.0366	0.0656	1.0000	,
Business growth	0.1567	0.2050	0.1186	0.1748	0.1878	0.1718	0.1257	0.1933	0.2035	0.1593	0.1766	0.2816	0.1341	0.1430	0.6641	1.0000

Source: Irene, B., 2016, Gender and entrepreneurial success: A cross cultural study of competencies of female SMEs operators in South Africa, PhD Thesis, Cardiff Metropolitan University

0.31385369 0.26062031 0.29543246 0.2833118 0.3056834 0.3400995 0.34592784 0.36169688 0.31787535 0.33679465 0.34607974 0.32078729

0.4638

0.5426

0.5001

0.5513

Note: Correlation is significant at ρ < 0.01.

Means

Standard deviation

Total