

## TRACKING THE VENTURE CREATION PHASES IN TERMS OF ENTREPRENEURIAL SELF-EFFICACY: LINKS TO COMPETITIVENESS OF SOUTH AFRICAN VENTURES

**Boris Urban**

*Wits Business School*

Accepted: May 2012

### Abstract

Examining entrepreneurial self-efficacy across venture creation phases is important as research indicates that behaviours to which self-efficacy corresponds are largely concerned with new-venture formation processes and as such are required of entrepreneurs well beyond the point of founding. Hypotheses are formulated, which take into account the sequential nature of entrepreneurial tasks in the venture process. A multidimensional instrument is used to collect data from medium businesses ( $n = 199$ ). Correlational and regression analysis are performed where empirical evidence supports that entrepreneurial self-efficacy during searching, planning, marshalling resources and implementing people phases of venturing are significantly associated with the competitiveness of the venture. Implications of this study can be advanced to the policy domain where it needs to be stressed that government initiatives will affect venture sustainability only if these policies are conceived in a way that influences entrepreneurial self-efficacy.

**Key words:** venture creation phases, entrepreneurial self-efficacy, competitiveness, skills, entrepreneurial tasks, South Africa

**JEL: D8, J24, L26, M13**

## 1 Introduction

Extant literature demonstrates that new firm formation is a specific, identifiable organisational process that has been subjected to previous empirical research (De Clercq & Arenius, 2006; Kickul, Gundry, Barbosa & Whitcanack, 2009; Mueller & Goic, 2003; Newbert, 2005). Of particular research interest has been the identification of factors, characteristics, and conditions which foster entrepreneurial processes, new venture creation and contributing successes factors (McGee, Peterson, Mueller & Sequeira, 2009). By positioning the new firm formation process as a dynamic capability (Newbert, 2005), a common set of gestation activities emerge for successful entrepreneurship, where entrepreneurs typically emphasise different venture creation steps to outperform the competition (Goel, Gonzalez-Moreno & Saez-Martines, 2003).

New venture creation is typically conceptualised in terms of broad stages or as

entrepreneurial tasks within a venture creation phases model (Clouse, 1991; Farrington, Venter, Eybers & Boshoff, 2011; McGee et al., 2009; Stevenson & Jarillo, 1990; Timmons, 2002; Vesper, 1996). The transition of individuals from one stage of an entrepreneurial process to another is often the result of a combination of various motivational and cognition components where environmental conditions and opportunities also play a role (Luiz & Mariotti, 2011; Shane, Locke & Collins, 2003). However, environmental factors being held constant, researchers argue (Shane et al., 2003; Urban, 2010) that human motivation plays a critical role in the entrepreneurial process. Being motivated is not only considered an integral aspect of the entrepreneurial process but must be supplemented with the requisite skills and competencies (Bandura, 1986; 1997; 2001). Unless individuals perceive themselves as capable and willing to be entrepreneurial, their venture will remain uncompetitive and underperforming. Recent research finds that although motivation is implied, or assumed, in

papers on intentions, scripts, and cognitive maps to entrepreneurial behaviours, it remains largely under researched despite its critical importance to predicting and explaining entrepreneurial behaviours (Carsrud & Brannback, 2011). This paper responds to calls for research (Poon, Ainuddin & Junit, 2006) in this direction by investigating entrepreneurial self-efficacy (ESE) across the venture creation phases and attempts to establish links with the competitiveness of medium-sized firms.

Research finds those with higher entrepreneurial self-efficacy as perceiving their environment as more opportunistic rather than fraught with risks, and they tend to believe in their ability to influence the achievement of goals (Chen, Greene & Crick, 1998; De Noble, Jung & Ehrlich, 1999). Since ESE refers to cognitive evaluations of personal capabilities with reference to specific tasks of entrepreneurship, it achieves the entrepreneurial distinctiveness that is well suited to tracking the venture creation phases (Chen et al., 1998; De Noble et al., 1999; McGee et al., 2009).

Many individuals in emerging economies may have the desire to pursue entrepreneurial ventures but are not engaging because they are lacking in self-belief and requisite entrepreneurial skills (Luthans, Stajkovic & Ibrayeva, 2000). Research confirms this lack of "can-do" attitude is prevalent in South Africa, where not only is there a sense of entitlement and an expectation that big business, government and others should create jobs, rather than one creating one's own employment, but aspiring entrepreneurs have low levels of self-belief, experience, inadequate education, and lack of access to finance and business-orientated networks (Herrington, Kew & Kew, 2010; Urban, 2006). While it is widely recognised that new ventures are pivotal to the growth and development of the South African economy, and inextricably linked to economic empowerment, job creation, and employment within disadvantaged communities (Gauteng Provincial Government, 2008), most entrepreneurs are restricted by their scarcity of skills, business knowledge and resources in their ability to grow and create competitive ventures (Urban, Van Vuuren & Barreira, 2008).

Although substantial research exists interrogating links between start-up motivations

and entrepreneurial intentions (Edelman, Brush, Manolova & Greene, 2010; Hmieleski & Corbett, 2006) there is still limited understanding of ESE's role in the new venture's performance after start-up. Examining ESE across venture creation phases is pertinent as research indicates that once small businesses begin to be sustainable their reported management challenges converge (Chan, Bhargava & Street, 2006). ESE can influence how well existing entrepreneurs discharge their responsibilities during each of the venture creation phases. The behaviours to which ESE corresponds are largely concerned with new-venture formation and as such are required of entrepreneurs well beyond the point of founding (Forbes, 2005).

Not only does the literature suggest that higher levels of ESE influence the likelihood of successfully launching a new business, but there have been calls for future research to apply ESE effectively so as to understand casual directions and see how ESE can be related to venture performance (McGee et al., 2009). Equally important, it remains unclear if certain underlying dimensions of ESE are more important than others after a new business is launched. For instance experienced entrepreneurs might be more aware of the role of luck and favourable timing in their achievements, and therefore more humble about their own ability to control the destinies of their ventures. This effect might be more marked for those entrepreneurs pursuing high-growth ventures (McGee et al., 2009; Urban, 2009).

Given the recognised need for data-based and integrative process studies of the venture creation phases, this paper makes a contribution to the field of entrepreneurship by empirically investigating ESE across the different venture creation phases and providing links to the competitiveness of enterprises. The paper proceeds by first accessing a relevant theoretical base to support the hypotheses which are formulated on existing findings from a range of disciplines. Next the research approach and measurement issues related to the constructs are discussed. This is followed by specific analytic methods best suited to test the hypotheses. Results and implications follow, and the study's limitations are

addressed and future research directions are suggested.

## 2

### Theoretical overview

#### 2.1 Competitiveness of ventures

Competitiveness is a concept often related to long-term performance of firms and economies. Many governments believe that new ventures can contribute towards the promotion of more equitable development, as well as the enhancement of the competitiveness of local industries within a global economy (Bygrave & Minniti, 2000; Preece, Miles & Baetz, 1998; Wright, Hmieleski, Siegel & Ensley, 2007).

At the firm level, existing studies suggest that a sustainable competitive advantage is derived from how a firm approaches strategy formulation (Dess, Lumpkin & McGee, 1999). Strategic management in entrepreneurial firms has gained prominence in recent years as organisations compete in volatile environments. The venture creation environment is characterised by complexity and dynamism, with ventures having to anticipate future scenarios and develop proactive strategies in an ambiguous and unstructured surrounding (Allen & Stearns, 2004).

Competitiveness, with a focus on small and medium enterprises (SMEs) (ventures and SMEs are used interchangeably in this paper), has shown how the interaction of the scope for action or growth in the business environment, together with the degree of access to capital resources and the intrinsic ability of the firm, are all necessary factors required to improve the performance of the firm (Chan, Bhargava & Street, 2006; Ireland, Covin & Kuratko, 2009). For any venture, consequences primarily concern the degree to which results lead to acceptable (or better) current performance and to the possibility of acceptable (or better) future performance. Literature has emphasised several organisational-level outcomes of entrepreneurship, where two principal types of such outcomes are: (1) capability development, and (2) strategic repositioning (Ireland, Covin & Kuratko, 2009).

Competitiveness is the capacity of ventures to create and sustain economically viable

industry positions (Nelson, 1991; Teece, Pisano & Shuen, 1997). Competitive development is created as ventures use entrepreneurial initiatives to explore new technologies or product-market domains or exploit existing ones. Enhanced competitiveness, in particular, is often the result of exploitation of entrepreneurial opportunities. In terms of strategic repositioning, entrepreneurial behaviours can (1) place the venture, or portions thereof, in a new position within its pre-existing product-market domain(s), (2) alter the attributes of that domain(s), and/or (3) position the venture within a new product-market domain(s) (Ireland, Covin & Kuratko, 2009).

Rather than rely on typical performance measures such as sales and profit growth, assessing the competitiveness of SMEs is important, particularly as differences in growth measures have led to different relationships among constructs, with a reduction in the appropriateness of accumulating knowledge across studies (Shepherd & Wiklund, 2009). Building in this direction of competitiveness the focus of this study is on the organisational outcomes resulting from entrepreneurial action during the venture creation phases.

#### 2.2 Entrepreneurial self-efficacy in the venture creation phases

Self-efficacy is an important motivational construct that influences individual choices, goals, emotional reactions, effort, coping and persistence. It refers to individuals' convictions about their abilities, and consequently an important set of cognitions is self-efficacy or beliefs about one's capacity to perform at designated levels (Bandura, 1986; 1997; 2001; Bird, 1989; Boyd & Vozikis, 1994; Stajkovic & Luthans, 1998). Self-efficacy is based on tenants of social cognitive theory (SCT) which favours the concept of interaction where behaviour, personal factors, and environmental influences all operate interactively as determinants of each other. Previous studies on entrepreneurial motivation have focused on basic concepts such as achievement need, risk taking, tolerance of ambiguity, and locus of control, all of which have yielded mixed results. However, findings have been more consistent for the self-efficacy construct when applied to entrepreneurial behaviour (Bradley

& Roberts, 2004; Forbes, 2005), and through its effect on entrepreneurial orientation (Poon et al., 2006). Unlike personality traits self-efficacy can be developed through training and modelling. Efficacy judgments are task specific and regulate behaviour by determining task choices, effort and persistence (Earley, 1994; Gist & Mitchell, 1992; Stevens & Gist, 1997; Vesper & McMullan, 1997).

The self-efficacy construct has application to entrepreneurship and the entrepreneurial self-efficacy (ESE) construct has been proposed to predict the likelihood of the individual being an entrepreneur, that is entrepreneurial self-efficacy refers to the strengths of a person's belief that he/she is capable of successfully performing the various roles and tasks of an entrepreneur (Boyd & Vozikis, 1994; Chen et al., 1998; De Noble et al., 1999; Krueger & Brazeal, 1994). Researching ESE is important, since it can affect individuals' willingness to engage in entrepreneurship as well as the behaviour of those who already are entrepreneurs (Urban, 2009). Previous research on ESE has been related to the pursuit of entrepreneurial activity in various ways, for instance, where general self-efficacy (GSE) is related to perseverance in difficult fields and greater personal effectiveness (Chen, Gully & Eden, 2001; Markman, Balkin & Baron, 2002), and where ESE is influenced by the way in which entrepreneurs make strategic decisions (Forbes, 2005). The value of understanding ESE to help predict how well entrepreneurs perform the tasks associated with the venture creation phases cannot be underestimated (McGee et al., 2009; Poon et al., 2006).

Since self-efficacy beliefs are domain specific, it is important to consider what is being measured and how. Some measures of ESE, while multi-dimensional, are based on general management tasks such as marketing, strategic planning, and business decision-making. These more generalised measures of ESE however do not assess confidence in performing specific tasks associated with planning, launching, and growing a new venture. Another way of measuring self-efficacy of a broader domain, such as entrepreneurship, as Chen et al. (1998) did with ESE, is to develop a conceptual framework of task requirements on the basis of

which self-efficacy of a domain is aggregated from self-efficacy of various constituent sub-domains. Many studies have conceptualised self-efficacy as a task specific or state like construct (SSE). De Noble et al. (1999) developed a measure of ESE consisting of six sub-scales tailored specifically to the venture creation phases.

Despite these efforts there is inconsistency in the manner in which researchers attempt to capture the dimensionality of the ESE construct which impedes further development and effective application of the construct. Indeed much of the preceding empirical research has relied on 'total ESE' scales and the results of such research have shed little light on how the underlying dimensions of ESE influence entrepreneurship and which ones, if any, are most important for strengthening ESE. While most theorists argue that ESE is best conceptualised as a multi-dimensional construct, much of the empirical research has relied on limited-dimensional or even one-dimensional measures of ESE (Arenius & Minniti, 2005; Baum & Locke, 2004). While the ESE construct holds promise, it remains empirically underdeveloped and many scholars have called for further refinement of the construct (for example, Forbes, 2005; Lee & Bobko, 1994; Kolvareid & Isaksen, 2006).

In a recent study McGee et al. (2009) demonstrate the multi-dimensional nature of the ESE measure by testing it within a four-phase venture creation framework. This framework builds in the direction of new venture creation being conceptualised in terms of broad stages or as entrepreneurial tasks within a venture creation model (Stevenson & Jarillo, 1990; Timmons, 2002). These stages are labelled (1) searching, (2) planning, (3) marshalling, and (4) implementing (Kickul et al., 2009; Mueller & Goic, 2003; McGee et al., 2009).

- 1) The searching phase involves opportunity identification and development. Lumpkin, Hills and Shrader (2004) argue that the creation of successful businesses follows successful opportunity development and also involves the entrepreneur's creative work.

- 2) The planning phase consists of activities by which the entrepreneur converts the idea into a feasible business plan. Here the idea or business concept is evaluated in terms of various market and profitability criteria.
- 3) The marshalling phase involves assembling resources to bring the venture into existence. To bring the business into existence, the entrepreneur gathers (marshals) necessary resources such as capital, labour, customers, and suppliers without which the venture cannot exist or sustain itself.
- 4) The implementing phase requires that the entrepreneur grow the business and ensure the sustainability of the venture. To this end, the successful entrepreneur applies management skills and principles, particularly in implementing people management and financial management.

On the basis of above theory and in line with empirical evidence, by recognising the multi-dimensional nature of ESE within a four-phase venture creation framework, six hypotheses are formulated which allow for specific explanations to emerge based on expected relationships with venture competitiveness.

- H1: There will be a strong positive relationship between ESE concerning the searching venture phase and competitiveness.
- H2: There will be a strong positive relationship between ESE concerning the planning venture phase and competitiveness.
- H3: There will be a strong positive relationship between ESE concerning the marshalling venture phase and competitiveness.
- H4: There will be a strong positive relationship between ESE concerning the implementing people venture phase and competitiveness.
- H5: There will be a strong positive relationship between ESE concerning the financial management venture phase and competitiveness.
- H6: There will be a strong positive relationship between attitude toward venturing and competitiveness.

Following McGee et al. (2009) the hypotheses take into account the multidimensional and sequential nature of entrepreneurial tasks. The theoretically grounded four-dimensional structure

of ESE, includes the modification that the dimension of 'implementing' has two sub dimensions (one representing the 'people aspects of implementation' and the other representing the 'financial aspects of implementing'). Attitude toward venturing is included in the set of hypotheses, as the theory of planned behaviour (TPB) (Ajzen, 1991) identifies attitudinal antecedents of intentions, which reflect the perceived desirability and the perceived feasibility of intentions and is thus related to perceptions of self-efficacy. Furthermore path analysis confirms that the correlation between attitudes and behaviour is explained by attitude – intentions behaviour links (Kim & Hunter, 1993; Krueger, Reilly & Carsrud, 2000).

Although venture performance is influenced by a host of factors including the sector in which the firm operates, firm age and size, as well as cultural and environmental contexts (Luiz & Mariotti, 2011), it is specifically argued for purposes of this paper that the competitiveness of the SME is influenced by the ESE of individuals as conceptualised through the different venture creation phases.

### 3

## Methodology

### 3.1 Sampling and data collection

Much of the existing empirical research on ESE has relied on data collected exclusively from samples of university students. This lack of diversity in those populations sampled and tested has proved an obstacle in the development of an appropriate ESE construct.

The sampling frame was identified from the SME Toolkit SA which is affiliated with the World Bank and Business Partners locally (SME Toolkit, 2011), and the Johannesburg Chamber of Commerce and Industry (JCCI), which collectively represent a population of approximately 4400 businesses. The sampling frame for this study was based on businesses operating in the greater Johannesburg area. Johannesburg is situated in the Gauteng province, the economic hub of South Africa, which has the highest number of businesses in the country (Gauteng Provincial Government,

2008; South African Business Guidebook, 2005/6).

In line with the objectives of the study the focus was on ventures that have navigated the different venture phases and performed tasks required beyond start-up activities. Addressing ESE within this venture phase framework at the firm level corresponds to similar studies' sample characteristics (Kreiser, Marion & Weaver, 2002). As ESE refers to an owner's self-perception of a firm's strategic orientation, their self-perception will be closely related to the behaviour of the venture. Consequently ESE measures the owners' self-perception and accordingly serves as a relevant proxy for measuring the entrepreneurial tasks within the venture creation phases. Considering that SMEs in South Africa can employ up to 200 people (Econometrix, 2002; South Africa Survey, 2006/2007), and in line with the global entrepreneurship monitor (GEM) studies' operational definitions (Bosma & Levie, 2009), medium-sized ventures were targeted represented by new business owner-managers who currently own and manage a new business that has paid salaries for more than three months but not more than 42 months. Sample parameters, which served as control variables, included: (a) gender, (b) age, (c) education level, (d) ethnic group, (e) work experience, (f) business sector, and (g) firm employment size class set as medium ventures. These ventures operated in a variety of business sectors including manufacturing, financial services, and retail and wholesale.

Based on the eligibility criteria 677 potential respondents were surveyed. The survey was solicited physically with periodic reminder telephone calls. Based on eligibility criteria, 199 usable responses (an effective 29 per cent response rate) was generated as the final sample. To test for non-response bias archival sources were used where firm size and age were compared with non-responding firms by using secondary data. Results of t-tests comparing these firms with the current study sample's mean scores on select ESE variables revealed no differences ( $p > .10$ ), suggesting that the sample appears to be representative of the population from which it is based (Cooper & Emory, 1995).

## 3.2 Measures

### 3.2.1 Predictor variables

*ESE during venture phases:* Instruments utilised in previous studies were scrutinised for construct validity and reliability. In previous studies the items for the ESE factors produced values for Cronbach's alphas above 0.80, indicating high reliability (Chen et al., 1998; De Noble et al., 1999; McGee et al., 2009; Urban, 2006). Similarly in previous studies, the factor structure of the ESE items was tested using a confirmatory factor analysis approach and using covariance analysis. The factor analysis model provided evidence of convergent validity (the items included in the model share a relatively high degree of the variance of their respective underlying constructs, as indicated by the factor loadings being statistically significant at  $p = .05$ ) (McGee et al., 2009). Given the evidence supporting the application of these scales confirms that their further use is justified. Based on the a priori inclusion of compelling theory, as well as evidence for discriminant and convergent validity of these measures, the present study retests the internal consistency of items measuring ESE within the four-phase new venture creation phases, for this study's sample.

Five ESE dimensions are used which were previously conceptualised in the hypotheses section, and are labelled as: (1) searching, (2) planning, (3) marshalling, (4) implementing-people, and (5) implementing-financial (McGee et al., 2009). In the original study, to test the discriminant validity of these five ESE dimensions and to better understand the nomological validity of the ESE dimensions, items representing attitude toward venturing were included and are subsequently also used in this present study. To measure ESE across the venture phases, three items were used to measure the ESE search dimension, four for ESE planning, three for ESE marshalling, six for ESE people, and three for ESE financial, and three items for attitude toward venturing. All items were measured on a 5-point Likert scale where respondents were asked to indicate their confidence on their ability to perform ESE dimensions (1 = very little to 5 = very

much). Cronbach's Alphas were calculated indicating relatively high reliability (Nunnally, 1978) across dimensions: (1) searching  $\alpha = 0.77$ , (2) planning  $\alpha = 0.71$ , (3) marshalling  $\alpha = 0.65$ , (4) implementing-people  $\alpha = 0.81$ , (5) implementing-financial  $\alpha = 0.88$  and (6) attitude toward venturing  $\alpha = 0.85$ .

### 3.2.2 *Dependant variables*

Competitiveness was measured in terms of two venture outcomes: (1) capability development, and (2) strategic repositioning. Seven items in total were used to measure these two indicators of competitiveness, where respondents were asked to what extent they agree or disagree (1 = strongly disagree to 5 = strongly agree), with statements indicating levels of attaining capability and positioning. The following items measured competitiveness (Ireland et al., 2009), and are reported as a consolidated score in further analysis:

- Ability of venture to develop capabilities in order to exploit entrepreneurial opportunities;
- Venture capacity to create and sustain an economically viable industry position;
- Venture use of entrepreneurial initiatives to explore new technologies or product-market domains;
- Venture use of entrepreneurial initiatives to exploit existing technologies or product-market domains;
- Strategic positioning of the venture within its pre-existing product-market domains;
- Strategic positioning of the venture to alter the attributes of their product-market domains;
- The ability of venture to assume a new strategic position in relation to its competitors.

An overall Cronbach's Alpha of 0.83 was obtained for these two combined sets of measures representing overall competitiveness.

### 3.2.3 *Control variables*

Variables measuring gender, education, ethnic group affiliation, work experience, and a question pertaining to relatives or friends who either are or have been entrepreneurs were surveyed. These variables provided a fuller picture of the sample characteristics. There is a prior theoretical basis for expecting these

variables to have a systematic relationship with either the dependant or independent variable, or both (Minniti & Bygrave, 2003), where for instance Chen et al. (1998) showed that prior education and gender were related to ESE, and Drnovsek & Glas (2002) showed that prior entrepreneurial experience was related to ESE. However, as the focal point of this study was the influence of ESE on competitiveness, not on the of the potential influence of other individual level variables, only firm size was included as a control variable which coincided with sampling parameters. This restriction ensured that a manageable number of variables were used in the correlation and regression analysis.

### 3.3 *Data analysis*

Descriptive statistics were first calculated, followed by correlational and regression analysis. Common method response bias was controlled for by safeguarding respondent anonymity, as well as ensuring that the questions relating to the dependent variables were located away from the independent and control variables in the instrument. Furthermore, all items relating to independent, dependent and control variables were explored in a single principal component analysis (PCA), using Harman's one-factor test (Podsakoff et al., 2003) to check if one component accounted for most of the variance. Six components with eigenvalues greater than 1.0 were detected, which accounted for 63 per cent of the variance. The largest component accounted for only 15 per cent. Consequently no evidence of common method bias was identified.

## 4

### Results

#### 4.1 *Sample characteristics*

The profile which emerges from the sampling procedure is that the typical respondent is predominantly male, 41 years old, university/college graduate, with more than six years work experience. The dispersion of respondents in terms of ethnic groups (Indian = 14 per cent; Black = 66 per cent; White = 19 per cent; Coloured = 4 per cent), reflects South Africa's

multiracial society. Additionally several respondents indicated they had parents (51 per cent), friends (85 per cent) or relatives (75 per cent) who are or had been entrepreneurs.

#### 4.2 Correlation and multiple regression

Mean scores, standard deviations and correlation coefficients are displayed in Table 1. Descriptive statistics indicate that mean scores are leaning towards the 'mostly agree' end of the scale. These high average scores across all the dimensions, suggest that individuals have high levels of confidence in performing tasks through the different venture stages. In terms of competitiveness the mean score is 3.786 suggesting a well-positioned and competitively capable venture.

For the correlation matrix, refer to Table 1, the Pearson Correlation Coefficients are reported with levels of significance denoted. The interpretation of these correlations and the corresponding levels of significance allowed for acceptance or rejection of the hypotheses, as follows:

- ESE concerning the searching phase was positively and significantly correlated with

competitiveness ( $r = 0.45, p < .01$ ), providing support for hypothesis 1.

- ESE concerning the planning was positively and significantly correlated with competitiveness ( $r = 0.37, p < .01$ ), providing support for hypothesis 2.
- ESE concerning the marshalling phase was positively and significantly correlated with competitiveness ( $r = 0.35, p < .01$ ), providing support for hypothesis 3.
- ESE concerning the implementing people phase was positively and significantly correlated with competitiveness ( $r = 0.20, p < .05$ ), providing support for hypothesis 4.
- ESE concerning the implementing finance phase was not significantly correlated with competitiveness ( $r = 0.28$ ), not providing support for hypothesis 5.
- Attitude toward venturing was positively and significantly correlated with competitiveness ( $r = 0.19, p < .05$ ), providing support for hypothesis 6.
- The control variable of firm size was not significantly correlated with competitiveness or any of the ESE venture phases.

**Table 1**

Descriptives and correlations for venture creation phases and competitiveness

	Mean	SD	1	2	3	4	5	6	7
1 Searching	4.186	0.651	1	.489**	.505**	.408**	.142*	.276**	.457**
2 Planning	3.981	0.600	.485**	1	.527**	.489**	.334**	.277**	.373**
3 Marshaling resources	4.085	0.597	.508**	.520**	1	.523**	.162*	.365**	.354**
4 Implementing people	4.334	0.505	.404**	.483**	.521**	1	.317**	.408*	.202*
5 Implementing financial	3.991	0.842	.142*	.332*	.161*	.315**	1	.192*	.025
6 Attitude to venturing	4.534	0.544	.272**	.277**	.368**	.402**	.195*	1	.191*
7 Competitiveness	3.786	0.651	.458**	.376**	.354**	.208*	.286	.194*	1

\*  $p < .05$ ; \*\*  $p < .01$ , two-tailed.

To further evaluate the relationship between the ESE dimensions and competitiveness, multiple regression analysis was conducted. Refer to Table 2 for the full set of results. Multiple regression analyses, using ordinary least squares regression, were performed to determine the predicted relationship between the specified variables. Firm size as the control variable was included in the regression analyses by means of an appropriate dummy variable. A significance level of 5 per cent was considered appropriate for this research and all

statistical tests were carried out at this level. Table 2 represents the independent variables regressed on the various dependent variables. The use of multiple regressions allows for the partitioning of variance with correlated predictors, thereby reducing the likelihood of making a Type 1 error (Cohen & Holliday, 1998). It is worth noting that although the coefficient of determination (R-squared) does not exceed 30 per cent, the relationships determined through the regression analysis, while they may be weak, are nevertheless

statistically significant. Model 1 has an R-square of 0.221, which is interpreted as the predictors (ESE dimensions in the venture phases) explaining 22 per cent of variance in the dependant variable (competitiveness). In the ANOVA section (not shown) an F-value of 5.991 is highly statistically significant (0.000). Referring to Table 2, the constant coefficient provides a t-value of 3.908, significant at the 0.05 level ( $p < 0.001$ ). The highest beta weight (0.305) and only significant t-value (4.320,  $p < 0.001$ ) is for the ESE search phase dimension. The second highest beta was for the ESE planning phase dimension, with a borderline

level of significance ( $p = 0.012$ ). Since other coefficients are not significant, the predictive and explanatory power of this model is reduced. To try and determine if the predictive power of the regression could be improved by only entering the significant coefficients another model was tested where ESE search and ESE planning were entered together with the dependant variable. The adjusted R-square was 0.228 in this instance suggesting a very small improvement where the two ESE dimensions explain only a marginally greater variance in competitiveness.

**Table 2**  
Regression results for ESE venture phases on venture competitiveness

	$\beta$	Std. error	T-value $H_0: \beta_{(i)} = 0$	Sig.	Reject $H_0$ at 5%
Step 1 <sup>a</sup>					
Constant	1.623	0.415	3.908	0.000	yes
Searching	0.305	0.071	4.320	0.000	yes
Planning	0.208	0.082	2.538	0.012	yes
Marshalling	0.112	0.084	1.323	0.187	no
Implement people	-0.091	0.095	-0.960	0.338	no
Implement finance	-0.064	0.048	-1.334	0.184	no
Attitude towards venture	0.061	0.077	0.789	0.431	no
Firm size (medium)	0.096	0.131	0.738	0.461	no

<sup>a</sup>Variable(S) introduced in step 1 include: ESE search, plan, marshal, people, finance, attitude, firm size.

Examinations of the collinearity diagnostics reveal relatively low variance proportions for the ESE dimensions. These diagnostics when read in conjunction with collinearity statistics, not shown due to space limitations, indicate variable inflation factor (VIF) values between 0.274 and -0.022. These figures are well below critical values and deemed as acceptable, indicating no incidence of multicollinearity. When the values are 10.0 or more the regression coefficients can fluctuate widely from sample to sample, making it risky to interpret the coefficients as indicators of the predictors (Cooper & Emory, 1995).

Apart from the above analysis, to try and make further sense of the results differences in ESE across venture phases were tested between groupings of gender, education and work experience. Initially the descriptives were interrogated in terms of lower bound and upper bound values, followed by test for homogeneity of variances. The Levene statistic

was significant and greater than 0.05 across all ESE dimensions for all variables. A one-way analysis of variance (ANOVA) was used to compare ESE mean scores on first gender and education and then work experience. ANOVA results were interpreted as follows (not shown): for the ESE search dimension there is a 0.288 probability of obtaining an F-value of 1.488 or higher if there are no differences among group means in the population. Since this probability exceeds 0.05 one can conclude that for this ESE dimension as well as for all the other dimensions there are no significant differences among the ESE mean scores across these variables. Further post-hoc robust tests of equality of means were calculated and the Brown-Forsythe statistic indicates that there were no significant differences on ESE mean scores across gender and education. The same procedure in terms of ANOVA and post-hoc comparisons were conducted for work experience, with no significant results detected.

## 5

### Discussion

The purpose of this study was to build on research incorporating ESE as conceptualised through the four phases of the venture creation process and to establish possible links to venture competitiveness. Specifically it was hypothesised that each of the venture creation phases will be significantly associated with the competitiveness of the ventures. The study demonstrates that ESE influences how entrepreneurs discharge their responsibilities during the venture creation phases and that these behaviours to which ESE corresponds are largely concerned with tasks that are required of entrepreneurs well beyond the point of founding. The empirical evidence ensuing from this study supports five out of the six propositions, where ESE in searching, planning, marshalling resources, and implementing people, as well as attitudes toward venturing were significantly associated with the competitiveness of the venture.

These findings translate into the following entrepreneurial actions that are desirable during the venture creation phases in order to ensure competitiveness: (1) searching in terms of opportunity identification and development; (2) planning and evaluating the business concept in terms of various market and profitability criteria; (3) gathering (marshalling) necessary resources such as capital, labour, customers, and suppliers without which the venture cannot exist or sustain itself; (4) growing the business and ensuring the sustainability of the venture through implementing people management practices. The results also resonate with the suggestion that attitudes toward venturing may have important implications for the competitiveness of a venture after the founding event (Forbes, 2005).

The only non-significant result in this study, in relation to venture competitiveness was for the ESE implementing financial management phase of the venture process. This means that based on the study sample the respondents lack the necessary beliefs in implementing financial management activities. This is perhaps indicative of the high rate of financial illiteracy which has been ranked as the most important factor inhibiting entrepreneurial activity in South

Africa (Orford et al., 2003).

Based on the regression results the different ESE dimensions in the venture creation phases explain a modest, albeit significant amount of variance in the competitiveness of the SME. Competitiveness was conceptualised as firm outcomes resulting from entrepreneurial action during the venture creation phases and measured in terms of competitive development and strategic positioning, as a consolidated score. Competitive development has been recognised as important as ventures using entrepreneurial initiatives to explore or exploit new technologies or product-market domains, particularly by exploiting entrepreneurial opportunities. The same importance is often attached to strategic repositioning, where entrepreneurial behaviours during the venture creation phases can place the venture in a new position within its pre-existing product-market domain(s).

Interlinking the empirical results of this paper with established literature allows for additional insights to emerge. While individuals are thought to identify opportunities (aligned with the searching phase) because they possess uniquely different forms of knowledge or human capital (Venkataraman, 1997), this study confirms that ESE as a task specific activity plays an important role at the start of this process. This finding is consistent with the view that during the venture process phases, competent functioning requires both skills and self-beliefs of efficacy. Operative efficacy calls for continuously improving multiple sub-skills to manage ever-changing circumstances, as typified in entrepreneurial environments, most of which contain ambiguous, unpredictable and often stressful elements (Chandler & Jansen, 1992). Moreover as entrepreneurial opportunities encompass a social learning process whereby new knowledge continuously emerges to resolve uncertainty inherent to each stage of the venture creation phases, the relevance of ESE in the searching, planning, marshalling, and implementing phases is confirmed. This would suggest that a major factor influencing the process of opportunity recognition and development which leads to venture sustainability includes maintaining high levels of ESE throughout the venture creation process. The success of any venture,

particularly in terms of competitiveness is more probable when an individual has the ESE required to structure (accumulate and strategically divest), bundle (successfully combine), and leverage (mobilise and deploy) its resources (Sirmon, Hitt & Ireland, 2007). Not surprisingly the relationship between self-efficacy and performance has been found to be mediated by strategy use and vice versa (Forbes, 2005), which reflects the generative capability of self-efficacy where cognitive, social, and behaviour sub-skills are organised into integrated courses of action. Such action requires perseverant effort and self-doubters are quick to abort this generative process if initial efforts are deficient (Bandura, 1997).

In a broader framework, research on entrepreneurship, in an emerging market context as a whole, may be considered valuable as very few empirical studies have previously been conducted which focus on ESE and competitiveness. Examining ESE in an emerging market context is pivotal to understanding entrepreneurship, since little evidence exists that self-efficacy is salient to entrepreneurs from non-Western cultures (Vecchio, 2003). Investigating how different individuals under different socioeconomic circumstances, display ESE is important as ESE may be context specific, and one can expect patterns of ESE to vary depending on an individual's situational context (Urban, 2010). This is important as emerging economies are unique environments that offer the ability to obtain fresh insights to expand theory and our understanding of it by incorporating more contextualised considerations (Bruton, Ahlstrom & Obloj, 2008).

By contextualising this study in the current South African socio-economic milieu, it becomes clear that in order to successfully navigate the venture creation phases, entrepreneurs need high levels of ESE. Unless entrepreneurs perceive themselves as capable and willing to be entrepreneurial, their venture will remain uncompetitive and underperforming. Being motivated is not only considered an integral aspect of entrepreneurship but must be supplemented with education and training, since start-ups without possessing the requisite skills, knowledge and attitudes nullifies the formula for more entrepreneurship.

Moreover by acknowledging the legacy of

apartheid it becomes apparent that damage was very likely to have occurred to the self-esteem, motivation, and creativity of specific ethnic groups in South Africa (Ahwireng-Obeng, 2006). Disadvantaged communities often suffer from deficits in self-efficacy, where victims of poverty visibly reflect the symptoms of learned helplessness (Rabow, Barkman & Kessler, 1983).

Based on the present study's sample characteristics – mostly university educated and with some work experience, it is apparent that the results of the study are more in line with opportunity-driven entrepreneurship. It is more likely that opportunity-driven rather than necessity-driven individuals, with higher levels of human capital would have higher levels of ESE which serves to organise what opportunities they recognise and exploit marshal resources and implement strategies in order to promote the competitiveness of their ventures. This line of thinking resonates with Amartya Sen's (2000) 'capability approach', who assesses people's welfare in terms of their functioning and capabilities. In terms of an individual's current and future activities and states of being respectively, the 'capability approach' is useful in understanding the concept of the conversion factor which measures the individual's ability to convert existing opportunities into activities and achievement.

## 5.1 Implications

The practical implications of this study are that entrepreneurs need to develop ESE throughout the venture creation phases to ensure the competitiveness of the venture. The specific tasks required for this begin with the recognition of an entrepreneurial opportunity which is followed by the development of an idea for how to pursue that opportunity, and this leads to the evaluation of the feasibility of the opportunity, then to the development of the product or service that will be provided to customers, and requires an assembly of human and financial resources (Reynolds, 2011). This means that ESE is integral during each of the venture creation phases, and may be linked from one stage of the entrepreneurial process to another in terms of overall competitiveness. In fact, it is quite plausible that ESE influences one part of the process which has effects at that

stage in the process and possibly affects the later stages of the venture creation phases, meaning that an ESE is required continuously to ensure the venture is competitively capable.

Further implications of this study can be advanced to the policy domain where it needs to be stressed that government initiatives will affect venture creation only if these policies are perceived in a way that influences self-efficacy (Krueger et al., 2000). It has been suggested that the emergence of entrepreneurs in transitional economies depends on the entrepreneurial potential of the society which is, in turn, largely a function of systematic efforts of developing entrepreneurs with a high ESE. Instead of hoping for a massive capital infusion to improve business prospects, transitional economies may well be advised to implement formal self-efficacy programs to foster individual initiative for entrepreneurial development (Luthans, Stajkovic & Ibrayeva, 2000).

The practical implications of this study can also be advanced to the classroom setting, where consideration of self-beliefs in the design of curriculum and teaching methodologies can enhance learning and propel ESE. Improving the skills base and fostering positive ESE across the venture creation phases is critical for ensuring sustainable ventures.

## 5.2 Limitations and future research

This study has typical survey design limitations in that data was obtained from a self-administered questionnaire, where self-serving

bias may have influenced the responses. Secondly, since study was cross-sectional in design, results should be interpreted with caution and links between ESE and competitiveness cannot be confirmed unambiguously. Moreover the entrepreneurial process can only be understood as a constellation of personality features of which self-efficacy is only part of. Future studies could be extended to include specific contextual factors to help explain the venture formation process, and also identify variables which may moderate levels of ESE and venture competitiveness.

## 5.3 Conclusion

This study has contributed to the broader framework of existing theory and research on ESE, consequently enlarging scholarship in terms of the venture creation phases. Recognising the importance of self-belief issues in entrepreneurship, it seems that ESE is required continuously throughout the venture creation phases to ensure competitiveness. To continually improve multiple sub-skills required to manage ever-changing venture phases, requires competent functioning which is based on both skills and self-beliefs of efficacy. This paper makes a unique contribution by understanding how ESE plays an important role in determining the essential skill set needed throughout the four phases of the venture creation phases which leads to enhanced venture competitiveness.

## Acknowledgements

This study is based upon work supported financially by the National Research Foundation (NRF) (any opinion, findings and conclusions or recommendations expressed in this material are those of the author and therefore the NRF does not accept any liability in regard thereto).

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