Antecedents to social entrepreneurship intentions: An empirical study in South Africa

Boris Urban*
Heinrich Teise
Graduate School of Business Administration
University of the Witwatersrand

ABSTRACT

Scholarly interest in social entrepreneurship is increasing as researchers realise that entrepreneurship has not only an economic component but also a social component. Moreover, social entrepreneurship has direct relevance for South Africa, which is beset with many social concerns. In this study, several key variables are proposed as important antecedents to social entrepreneurial intentions. Based on a survey of 249 respondents, the results reveal that three factors account for the greatest amount of variance towards explaining intentions. These were: achievement, moral judgement and empathy, and self-efficacy. By specifying which antecedents are associated with social entrepreneurship intentions, a contribution is made that allows educators and curriculum designers to develop skill-building exercises and activities that focus on the social contribution of entrepreneurship.

INTRODUCTION

Social entrepreneurship has gained popularity in shifting market conditions, and can be viewed as a process that can serve as a catalyst for social change (Mair and Marti, 2006). Social entrepreneurs play a pivotal role in promoting initiatives and building social capital to address economic and social challenges in different regions and local communities (Urban, 2015; Jeffs, 2006).

Scholarly interest in social entrepreneurship is increasing as researchers look beyond entrepreneurship as only having an economic component or Schumpeterian purpose, where entrepreneurs spur innovation and speed up structural changes in an economy; they also recognise a social component of entrepreneurship (Bosma *et al*., 2012). Social entrepreneurship is an extended concept of entrepreneurship (Drucke, 1979), and has in recent decades gained momentum as a means to address social issues in a society (Nicholls, 2011). This is evident in philanthropic efforts, not-for-profit and non-governmental organisations, and corporate social initiatives, all of which are social interventions that attempt to address social inequities that may exist within society (2013; Dees, 2001).

Entrepreneurship in its traditional form can be described as 'commercial' entrepreneurship: it is primarily driven by profits and performance, and its success is typically measured by financial returns (Zahra *et al*., 2009; Austin *et al*., 2006). 'Social' entrepreneurship, on the other hand, encompasses those activities and processes that discover and exploit opportunities in order to enhance social wealth by creating new ventures, or by managing existing organisations in an innovative manner (Zahra *et al*., 2009). Social entrepreneurs, virtually by definition, attack social problems caused by shortcomings in existing markets and social welfare systems (Nicholls, 2011; Mair and Marti, 2006; Nicholls, 2005).

Social entrepreneurship and philanthropic studies are a relatively new area of study, and most studies have tended to focus on issues of definition with designs that rely on anecdotal evidence (Zahra *et al*., 2009; Mirabella *et al*., 2007). The term 'social entrepreneur' or 'social entrepreneurship' remains a poorly-defined construct (Zahra *et al*., 2009), and seems to have varying meanings depending on the context within which it is used (Seelos and Mair, 2005). Notwithstanding such definitional controversies, researchers have adopted a behavioural approach when analysing social entrepreneurship by focusing attention on the individual founder (Baierl *et al*., 2014; Urban, 2008; Urban, 2013; Weerawardena and Mort, 2006).

Across a wide range of different behaviours, behavioural intentions have been identified as the most accurate predictor of actual behaviour (Ajzen, 1991). An intention is a representation of a future course of action to be performed. It is not simply an expectation of future actions, but a proactive commitment to bringing them about (Liñán, Nabi and Krueger, 2012). In recognising that intentionality is a state of mind directing a person's attention (and therefore experience and action) toward a specific goal in order to achieve something (Bird, 1988), it has been applied to the entrepreneurship domain insofar as intention energises, directs and sustains action toward entrepreneurial goals (Baum *et al*., 2007).

Intention-based models, such as Bird's (1988) model of entrepreneurial intentionality, Ajzen's (1991) theory of planned behaviour (TPB) model, and Shapero and Sokol's (1982) model of entrepreneurial event (SEE), all offer a well-developed theory base, and suggest that, to encourage enterprise creation, it is important first to increase perceptions of feasibility and desirability (Krueger *et al.*, 2000). While the literature has primarily focused on direct relationships between entrepreneurial intentions and its determinants (Schlaegel and Koenig, 2014; Fitzsimmons and Douglas, 2011), little is currently known about the antecedents of beliefs, attitudes, and perceptions that influence perceptions of feasibility and desirability. In this vein, the present study builds on existing research; but instead of focusing on the direct influence of perceived feasibility and desirability on intentions, it is concerned with the antecedents of attitudes, perceptions and beliefs as specified in the entrepreneurial intention models. It is anticipated that such an approach will contribute to the existing literature by improving our understanding of the antecedents that influence the development of social entrepreneurial intention. This is important when explaining the relationship between individuals' perceptions, attitudes, and intentions (Schlaegel and Koenig, 2014). Moreover, investigating the sources and antecedents of behavioural intentions to set up a social enterprise is an important first step towards a comprehensive theory of social entrepreneurship (SE) (Mair and Noboa, 2003).

PROBLEM STATEMENT AND OBJECTIVES

Examining the antecedents of social entrepreneurship intentions (SEI) on an individual level is important as there is a need for an empirical investigation on intentions and its antecedents (Baierl *et al*., 2014). Despite the importance of entrepreneurial intentions, research such as the Global University Entrepreneurial Spirit Student Survey (GUESSS) finds low levels of entrepreneurial intent among South African university students, and suggests that they prefer to be formally employed rather than to start their own business ventures (Sieger *et al*., 2011). South Africa has recorded the lowest rate of entrepreneurial intentions among its youth (15 per cent) compared with other sub-Saharan African countries, which have averaged about 56 per cent (Turton and Herrington, 2013).

Furthermore, this study is particularly relevant in the present socio-economic milieu of South Africa. Investigating SEI may prove valuable because it offers the promise of empowering marginalised segments of the population (Urban, 2015). The study of SE has direct contextual relevance: traditional government initiatives are unable to satisfy the entire social deficit, and the survival of many non-governmental organisations is at stake. Such challenges are exacerbated by a social context characterised by massive inequalities in education and housing, and by the HIV/AIDS pandemic,and high unemployment and poverty rates (Rwigema *et al*., 2010).

These acute problems have shaped the objective of this study, which is to conduct empirical research into this emerging area of inquiry in order to identify the antecedents of SEI. Based on a literature review, the psychometric properties of selected constructs that underpin SEI are scrutinised, and the relationship between various antecedents (independent variables) and SEI (the dependent variable) is statistically assessed.

By studying SEI and by relying on a sample of students, the findings of this study may have important implications for educators who are actively trying to strengthen students' SEI. Moreover, student respondents often have the talent, interest, and energy to become the next generation of social entrepreneurs (Harding and Cowling, 2006).

The scholarly implications of this study relate to the empirically-derived factors, which add to the growing knowledge base and provide greater and clearer understanding of the antecedents that are related to SEI. It is anticipated that an enhanced understanding of SEI in general may serve as a catalyst for this important emerging activity in South Africa.

This study starts with a literature review of the constructs under investigation, which are then subjected to reliability and validity testing. Hypotheses are then developed and tested using regression analysis. Results and discussion follow. The study's limitations are addressed, and avenues for future research are recommended.

SOCIAL ENTREPRENEURSHIP INTENTIONS MODELS

Even though the entrepreneurial process has many components, it needs to be kept in mind that individuals are first-order forces explaining entrepreneurship. The entire entrepreneurial process unfolds because individual entrepreneurs act and are motivated to pursue

opportunities. The initial factor that sets entrepreneurial activity in motion is the psychological predisposition of the entrepreneur (Shane, 2003; Shane *et al.,* 2003).

Intentions are the single best predictor of any planned behaviour, including entrepreneurship (Krueger, 1993). There is a strong association between entrepreneurial intentions and actual entrepreneurial behaviour (Krueger *et al*., 2000). Attitudes influence behaviour by shaping intentions (Krueger *et al*., 2000). A person's attitude to a start-up is the degree to which the person believes being an entrepreneur is a worthwhile career choice (Rousseau and Venter, 2009), based on his or her own appraisal of their behaviour (Urban, 2013). A meta-analysis by Kim and Hunter (1993) shows empirically that intentions predict behaviour – but also that attitudes predict intentions. Additionally, the theory of planned behaviour (TPB) emphasises attitudes towards behaviour as powerful antecedents of intentions.

Since the seminal articles by Ajzen (1991), Shapero and Sokol (1982), and Bird (1988), a large and still growing number of studies have focused on entrepreneurial intentions. Several models have been used to explain and test entrepreneurial intentions.

Bird (1988) was one of the first authors to emphasise the importance of intentions when studying entrepreneurship. Based on qualitative data, her model suggests that intentions develop from both rational and intuitive thinking, which in turn are affected by the entrepreneur's social, political, and economic context and his/her perceived history, current personality, and abilities. Bird's (1988) model of entrepreneurial intentionality, modified and improved by Boyd and Vozikis (1994), suggests that individual self-efficacy can explain the development of entrepreneurial intentions. It also stipulates the conditions under which these intentions may be translated into action. According to Bird (1988:445), the intentional process begins with the entrepreneur's personal needs, values, wants, habits, and beliefs, which have their own precursors. Bird's model depicts several antecedents; and three intra-psychic activities (creating and maintaining a temporal tension, sustaining strategic focus, and developing a strategic posture) are at the core of intentional and behavioural outcomes that contribute to the creation of a new organisation and, in turn, affect the entrepreneur's needs, values, wants, habits and beliefs (Bird, 1988).

Shapero and Sokol's (1982) entrepreneurial event model (EEM) shows that intentions rely on the elements of perceived desirability, likelihood to act, and perceived feasibility. Based on the SEE model, the evidence is persuasive that perceived desirability and propensity to act explain well more than half the variance in intentions toward entrepreneurship, with feasibility perceptions explaining the most variance (Shapero and Sokol, 1982). This suggestion is that raising entrepreneurial self-efficacy will enhance perceptions of venture feasibility, thereby increasing the perception of opportunity. As self-efficacy is closest to action, and action to intentionality, it can be used to predict and study the entrepreneur's behaviour choice and persistence.

Ajzen's (1991) theory of planned behaviour (TPB) model is a recognised theory, in terms of which intentions are explained by attitudes toward behaviour, subjective norms, and perceptions of behavioural control. The TPB model suggests that people intend to perform a specific behaviour if their personal assessments of the behaviour in question are positive, if they think their important referents agree with it, and if they assume that the required resources and opportunities are available. If perceived behavioural control and actual control over the behaviour are identical, the intention should be the immediate antecedent of the behaviour. However, the intention can be changed by delays as new information emerges; and this may prevent the performance of the behaviour (Ajzen, 1991).

The TPB model further specifies antecedents of each of these attitudes:

- The attitude towards-the-act depends on expectations and beliefs about outcomes
- The subjective social norms depend on the expected support from others
- The perceived feasibility connects conceptually with self-efficacy, which is the perceived ability to execute target behaviour.

Using an evidence-based approach, and extending the pioneering work by Krueger *et al.* (2000) – the first to compare and integrate the extant theories of intentions – Schlaegel and Koenig (2014) recently meta-analytically tested and compared the TPB (Ajzen, 1991) and the EEM (Shapero and Sokol, 1982), the two most extensively tested competing theories that have been used to explain intentions. Schlaegel and Koenig's (2014) meta-analytic evidence suggests that a combination of the TPB with perceived desirability is most powerful in explaining and understanding entrepreneurial intentions. Positive attitudes toward entrepreneurship will positively affect the personal attractiveness of starting one's own business, as more favourable attitudes justify more favourable perceptions of the desirability of the behaviours related to the goal of becoming an entrepreneur (Fitzsimmons and Douglas, 2011).

Similarly in the social entrepreneurship space, the intent to pursue a social opportunity and create a social venture is predicated on the perceived desirability and feasibility of the undertaking. Desirability (that is, whether an individual is attracted by the social opportunity) is shaped,

in turn, by its antecedents, empathy and moral judgement. Feasibility refers to whether an individual feels capable of creating a social venture. The antecedents of feasibility include self-efficacy and social support (Mair and Noboa, 2006).The relevance of these antecedents in social entrepreneurship is highlighted in a model conceptualised by Mair and Noboa (2003), who emphasise moral judgement and empathy as key intentions towards social entrepreneurial goals (see Figure 1).

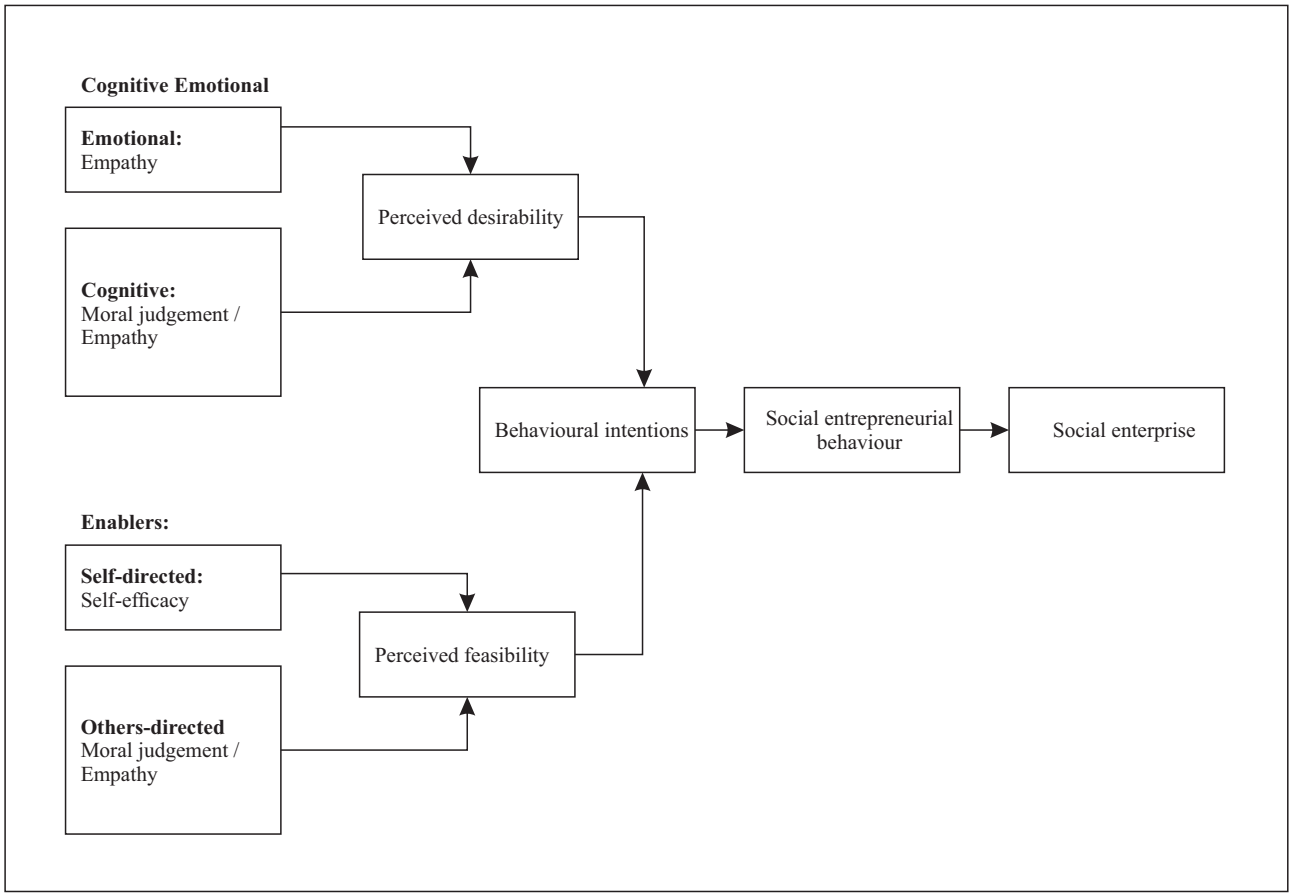
ANTECEDENTS TO INTENTIONS

Building on Mair and Noboa's (2003) model, the present study is concerned with the antecedents of SEI, particularly the desire for independence, a clear vision, need for achievement, self-efficacy, empathy and moral judgement, social support, and innovativeness (Urban, 2013; Nga and Shamuganathan, 2010; Baum *et al*., 2007; Vecchio, 2003; Thompson *et al*., 2000; Bird, 1988). Several behavioural attributes have also been associated with SEI, ranging from the courage to accept social criticism, experiencing less failure-anxiety, having greater receptivity to others' feelings, perseverance, communication skills, ability to appear trustworthy, creativity, and the ability to satisfy customers' needs (Prabhu, 1999). In a similar vein, Thompson *et al.* (2000) suggest that vision and fortitude are necessary traits for successful social entrepreneurs, as well as characteristics such as the ability to recognise opportunities, a collaborative leadership style, a long-term community-orientation, motivation, and teamwork capability.

Several other antecedents are proposed by Boschee (1998) who considers candour, passion, clarity of purpose, commitment, courage, and values as critical success factors when embarking on social entrepreneurial activities (Urban, 2008).

In addition to these factors influencing SEI, the background of the social entrepreneur, along with his/her previous entrepreneurial experience, are critical for triggering the desirability to launch a social enterprise (Prabhu, 1999). Background variables and past experience enhance self-beliefs, which in turn increase the social

FIGURE 1
A MODEL OF SOCIAL ENTREPRENEURIAL INTENTIONS



Source: Mair and Noboa (2003:8)

entrepreneurs' perceived capability to act and to create supporting networks. Both self-efficacy and social support 'enable' the entrepreneur to view the social enterprise as something feasible, and they are therefore important elements in the process of formation of SEI (Mair and Noboa, 2003:6). Perceived feasibility is affected by the person's perceived ability to perform the specific behaviour required for setting up the social venture (self-efficacy beliefs); and it is also influenced by the person's social capital, i.e., by the social support he/she generates from the social network. Mair and Noboa (2003:13) conceive the former antecedents as a 'self-directed' and the second antecedent as an 'others-directed' enabling factor in the SE process.

Mair and Noboa (2003) identify moral judgement acts as a discriminating variable at the moment of taking the decision to become a social entrepreneur. Building on this evidence – that empathy is positively associated with helping responses – they suggest that a person who is capable of recognising and sharing another person's emotions and feelings will develop a desire to help and do whatever is necessary to avoid another's suffering. Consequently they consider moral judgement and empathy as cognitive and emotional antecedents in their model of SEI.

Building on this research direction, several key variables that have been identified in the literature as important antecedents of SEI are operationalised for the purpose of this study (Urban, 2012; Baum *et al*., 2007). The selection of variables is by no means exhaustive. It is acknowledged that the actual process of how intentions and entrepreneurial event are formed is far more complex, and that no single factor can determine the outcome of this process. A number of variables are necessary, but no one is sufficient (Shapero and Sokol, 1982). It is also important to recognise that these variables work in combination rather than as single predictors (Mair and Noboa, 2003). Notwithstanding the complexity of the phenomenon and the reciprocal nature of relationships between the antecedents of SEI, hypotheses are formulated; but they are restricted to a number of variables and links. The variables on which the hypotheses are based are discussed below.

Independence

Many potential entrepreneurs, both commercial and social, are motivated to start their own enterprises through the desire for independence (Shane, 2003). Just as commercial entrepreneurs value independence, social entrepreneurs need autonomy and have a strong desire to be in control of their environment. Linked to the desire for independence is the desire for autonomy and an internal locus of control. The need for autonomy relates to the desire to be self-directing in decision-making (Vecchio, 2003), while an internal locus of control suggests that individuals believe that they are able to control their own environment, and that their actions or personal characteristics can affect outcomes (Shane *et al*., 2003). An internal locus of control is linked to self-monitoring, which refers to an individual's level of sensitivity and ability to adapt to situational cues (McShane and Von Glinow, 2003). Moreover, independence also manifests itself in that social entrepreneurs often experience uneasiness with the status quo, and need to be true to their own values and beliefs, as well as fulfil their need to be socially responsible (Baum *et al*., 2007; Prabhu, 1999).

Considering that intentions capture the motivational factors that influence a behaviour, and that individuals with a high need for independence and the belief that they can affect outcomes, are important indications of how hard they are willing to try, or how much effort they are prepared to exert to perform the behaviour (Urban, 2013), it is hypothesised that:

H^1: There is a positive relationship between the need for independence and social entrepreneurship intentions

Achievement

The achievement motivation demonstrated by entrepreneurs refers to the desire to achieve standards of excellence by realising set goals (Baum *et al*., 2007). High levels of achievement motivation are consistent with the demands of the entrepreneurial role, which appears to attract highly achievement-motivated individuals because of the potential to derive more achievement satisfaction in an entrepreneurial setting, a context that provides the challenge, autonomy, and flexibility for achievement realisation (Stewart and Roth, 2007). While most entrepreneurial research assumes that the entrepreneur is motivated by external rewards such as money, power and status (an economic view of human motivation), one is left with the reality that some people engage in entrepreneurial activities as an end in themselves. This perspective of intrinsic motivation and goal setting could explain why social entrepreneurs start social ventures even when there is no apparent reward for doing so, other than some internally-generated satisfaction (Carsrud and Brännback, 2011). Against this background, it is hypothesised that:

H^2: There is a positive relationship between achievement motivation and social entrepreneurship intentions

Self-efficacy

Self-efficacy influences individual choices, goals, and emotional reactions, and refers to the belief in one's own ability to realise desired goals or to perform desired tasks (Bandura, 2001). Self-efficacy is based on the tenets of social cognitive theory (SCT), which favours the concept of interaction where behaviour, personal factors, and environmental influences all function interactively as determinants of each other.

Efficacy judgements are task-specific and regulate behaviour by determining task choices, effort and persistence (Stevens and Gist, 1997; Earley, 1994; Gist and Mitchell, 1992). 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 (De Noble *et al*., 1999; Chen *et al*., 1998; Boyd and Vozikis, 1994; Krueger and Brazeal, 1994). Researching ESE is important, since it can influence individuals' willingness to engage in entrepreneurship, as well as the behaviour of those who are already entrepreneurs (Urban, 2013). Unlike personality traits, self-efficacy can be developed by means of training and modelling. Individuals who possess a higher level of self-efficacy will have a higher tendency to exploit entrepreneurial opportunities than people with a lower level of self-efficacy (Shane *et al*., 2003; Vecchio, 2003). The entrepreneurship process is strewn with difficult obstacles and setbacks, and in order to withstand such challenges, entrepreneurs have to be tenacious and persistent, and display high levels of self-efficacy (Urban, 2013; Baum *et al*., 2007). It is thus hypothesised that:

H^3: There is a positive relationship between self-efficacy and social entrepreneurship intentions

Empathy and moral judgement

Mair and Noboa (2003) note that empathy and moral judgement are related concepts, where empathy is conceptualised as a daily disposition to adopt a moral perspective, or to take the moral point of view. In other words, the two concepts interact. Empathy is both affective and cognitive, and refers to an ability not only to experience a similarity in feelings with someone else (that is, 'feel' that he/she is feeling) but also to understand and recognise the person's emotional state. Moral judgement refers to the ability of social entrepreneurs to consider the broader societal context from a higher moral and ethical perspective that transcends merely following the letter of the law – or, indeed, avoiding punishment (Mair and Noboa, 2006). Moral judgement and empathy both motivate an individual to help others in search of a common good. Evidence points to high levels of moral judgement, typically correlating positively with anti-authoritarian attitudes, high tolerance towards minority groups, and moderate political beliefs (Mair and Marti, 2006; Johnson, 2000). Social entrepreneurs place greater emphasis on ethical integrity than do commercial entrepreneurs, setting these two types of entrepreneurs apart ideologically (Mair and Marti, 2006). Prabhu (1999) found that social entrepreneurs are motivated by a need to be loyal to their own principles, and to be socially responsible. By the same token, Johnson (2000) claimed that social entrepreneurs crave social justice. Research suggests that social entrepreneurs value moral judgement and empathy jointly more than do commercial entrepreneurs, as pecuniary gains for self-enrichment are not as pronounced as in the latter's case (Mair and Marti, 2006). Against this background it is hypothesised that:

H^4: There is a positive relationship between moral judgement and empathy and social entrepreneurship intentions

Vision

A major consideration for most social entrepreneurs is the identification of a sustainable vision. In other words, in producing a social benefit, social entrepreneurs seek to do so in a way that realises maximum impact. Thompson *et al.* (2000) suggest that vision is a necessary precursor to successful social entrepreneurial activity. Consequently, vision is positioned as an antecedent to SEI as social entrepreneurs articulate their vision for the venture, and are engaged in strategic planning and policy formation before they start up. Additionally, in order for these facets to be realised, they must be able to lead effectively, to communicate, and to enlist the commitments of others (Roper and Cheney, 2005). Social entrepreneurs assume multiple leadership roles within their organisation, since they are considered the creators and transformers of the organisation (Prabhu, 1999) who are required to operationalise their vision (Nga and Shamuganathan, 2010; Thompson *et al*., 2000). As a result, social vision encompasses a sense of the social enterprise's destiny (Nga and Shamuganathan, 2010), and is a key antecedent to SEI. It is thus hypothesised that:

H^5: There is a positive relationship between the prevalence of a vision and social entrepreneurship intentions

Social support

Social support forms an invaluable resource for social entrepreneurs, offering advice, human resources, innovative ideas/capabilities, and financial and emotional support (Nga and Shamuganathan, 2010). Adler and Kwon (2002) argue that the breadth of social support, conceptualised as the social capital concept, reflects a primordial feature of social life – namely, that social ties of one kind (e.g., friendship) often can be used for different purposes (e.g., moral and material support, work, and social advice). Social capital is often operationalised through the identification of networks and network relationships, sometimes defined by the strength of ties, repetitive group activity such as the frequency of meetings and other formal interactions, as well as informal gatherings and other social activities, and social and family relationships. Social entrepreneurs display a high degree of network embeddedness (Shaw and Carter, 2007).

Network embeddedness provides mutual learning benefits for social entrepreneurs, allowing information to be shared for the common good of enterprises (Nga and Shamuganathan, 2010; Prabhu, 1999). Social support and networking are key for acquiring market and customer information, identifying and sourcing opportunities, and for initiating introductions to possible funding sources (Shaw and Carter, 2007). Furthermore, social support engenders and fosters civic spirit and solidarity (Mair and Marti, 2006). It is thus hypothesised that:

H^6: There is a positive relationship between the availability of social support and social entrepreneurship intentions

Innovativeness

The underlying drive of social entrepreneurs is to create social value rather than personal and shareholder wealth. The activity is characterised by innovation, or the creation of something new, rather than simply the replication of existing enterprises or practices. Innovativeness is modelled as an antecedent rather than as an outcome of SEI, as individuals differ greatly in their ability to capture, recognise, and make effective use of abstract, implicit, and changing information, all of which relates to the cognitive processes of individuals (Urban, 2015, 2013, 2012). The foundation of the entrepreneurial mind-set is cognitive adaptability, which is the ability to be dynamic, flexible, and self-regulating in one's cognitions, given the dynamic and uncertain environments typically faced by entrepreneurs (Urban, 2012). Social entrepreneurs need to create new products or services or new ways of delivery to satisfy the needs embedded in the social market (Mair and Marti, 2006), specifically in the process bringing about social change (Urban, 2013). Through innovation, social entrepreneurs unlock value by creating a platform for sustainable solutions by means of a synergistic combination of capabilities, products, processes and technology, and so create a social and strategic fit in underdeveloped, unchartered markets (Nga and Shamuganathan 2010). Against this background, it is hypothesised that:

H^7: There is a positive relationship between innovativeness and social entrepreneurship intentions

METHODOLOGY

Research design

This study is cross-sectional and survey-based in design. Quantitative-based research is relatively common in the investigation of basic cognitive, behavioural and attitude questions relating to entrepreneurship and management (Urban, 2012; Baron, 2008).

Given the predominantly psychological nature of the constructs examined in this study, students were surveyed using closed-ended questionnaires, as these student samples represent a meaningful first step in exploring the psychological basis for behaviours, as confirmed within the management and entrepreneurship literatures (Audia *et al.*, 2000). The use of students in the sample when investigating SE allows for predictive abilities to be improved, providing a fertile ground from which seeds of SE can sprout (Harding and Cowling, 2006). Moreover, past research suggests that student samples are very similar to actual entrepreneurs – provided that the sample respondents have a high entrepreneurial propensity (Hemmasi and Hoelscher, 2005).

Although there have been some criticisms of the use of students in behavioural research (Copeland, Francia and Strawser, 1973) and entrepreneurship research (Robinson, Huefner and Hunt, 1991), it is relatively common in the investigation of basic cognitive and psychological questions (Baron, 2008). Additionally, a student sample is likely to provide greater heterogeneity in social entrepreneurship intention than a sample of managers or entrepreneurs. This reasoning is consistent with Greenberg's (1987) rationale that the homogeneity typical of samples limited to actors within 'productive-economic organisations' challenges the assumption of generalisability beyond a very narrowly-focused population. Similarly, as Dipboye and Flanagan (1979) argued, laboratory research that relies mostly on students provides a firm basis for the generalisation to the population of working people and adults, whereas research that relies on contextually-grounded samples (managers, senior leaders, team leaders) is exceedingly homogeneous (professional, educated, etc.), and is therefore potentially limited in its generalisability.

Sampling and data collection

The population of this study (n = 450) consisted of students engaged in postgraduate business management studies at three different South African universities situated in the greater Johannesburg-Pretoria region. The rationale for selecting business management students is that past research has found that the propensity for entrepreneurial and social entrepreneurial activity engagement is more prevalent among business management students than in the rest of the general population (Urban, 2013; Turker and Selcuk, 2009; Harris and Gibson, 2008; Koj, 1996). Part-time postgraduate students with work experience were targeted, as they are more likely than full-time students, who probably have no work experience, to embark on an entrepreneurial career (Rousseau and Venter, 2009). Scherer *et al.* (1989) suggest that student populations add control and homogeneity to such a study because individuals studying business already have an interest in pursuing entrepreneurship-related careers, and they have the education required to run an enterprise – i.e., they have a basis for evaluating efficacy in some skills and abilities used in entrepreneurial careers. Additionally, student respondents often possess the talent, interest, and energy to become the next generation of social and civic leaders (Harding and Cowling, 2006).

A non-probability convenience sampling method (Saunders *et al*., 2011) was used, as students were targeted who were easily accessible during class times. For the purpose of the study, only respondents aged between 18 and 64 years were included in order to focus on the working-age population. As the objective of this study was to investigate SEI, individuals who were either full- or part-time social entrepreneurs, or who were starting a social enterprise at the time the survey was conducted, were excluded from the analysis. The survey was administered as a paper-and-pencil test, and as a matter of practicality was distributed in a classroom setting, allowing the researcher to maintain control over the environment, and to ensure a high response rate (55 per cent), yielding a final sample of 249 complete responses.

Ethical concerns were taken into consideration by ensuring that the administered instrument posed no risk or danger to respondents. The study purpose, the benefits to the sample population, and the participants' rights and protections were made explicit and explained to the respondents at the start of the data collection process. Moreover, full and open information (informed consent) was made available to respondents, to ensure that no form of deception and misrepresentation was used to extract information from the respondents and that their privacy and confidentiality was respected at all times.

Sample characteristics

The sample characteristics reveal that the majority of the respondents (n = 164; 65.9 per cent) were in the 26-34 year old group, while 55 (22.1 per cent) respondents were in the 35-45 year age group. Female respondents (n = 151) constituted 60.0 per cent of the sample, while 98 (39.4 per cent) of the respondents were male. Regarding the qualifications of the sample, 142 (57.0 per cent) of the respondents possessed a bachelor's degree, followed by 65 (26.1 per cent) who held an Honour's degree. The numbers of respondents who had a Master's or PhD degree were 15 (6.0 per cent) and 1 (0.4 per cent) respectively. In terms of the number of years' work experience in industry, the results indicate that 71 (28.5 per cent) respondents were in the '1-5 years' experience category, while there were 96 (38.6 per cent) respondents in the '6-10 years' work experience category, followed by 82 (32.9 per cent) in the '11 or more years' category.

Measures

The research survey design was a self-reporting closed-ended questionnaire consisting of three separate sections. Care was taken to ensure clarity in terminology, and to ensure that the items of the questionnaire addressed the hypotheses. Based on the literature review, suitable measures for the purpose of this study were identified where theoretical and empirical support for each construct was evident (Nga and Shamuganathan, 2010; Urban, 2008; Mair and Marti, 2006). The various items representing the independent variables (IV) and the dependent variable (DV) were based on the conceptualisation of these constructs, as discussed in the literature review, where multiple items were used to measure each of the constructs. The constructs representing the IVs, as conceptualised in the literature review section, were operationalised with the following number and type of items: Vision – three items (e.g., I prefer taking the lead in a group or team when performing a task; Given the chance, I would make a good leader of people); Social support – three items (e.g., A strong network is important for a company's development; Forming social networks and business networks are necessary for business venture creation); Innovativeness – four items (e.g., Innovation means using something that has been invented, and bringing about or adding improvements); Independence – three items (e.g., I prefer to have the freedom to make my own decisions); Achievement – three items (e.g., Failure does not easily get me down, instead it pushes me more to achieve my goal); Moral judgement and empathy – three items (e.g., I believe morals, values and ethics are important for venture creation); Self-efficacy – six items (e.g., I do not feel like giving up quickly when things go wrong, instead I persevere).

The DV was SEI, and was measured with five items. Based on the notion that the degree and intensity of individuals' entrepreneurial intent might reasonably be expected to vary from person to person, and to vary for the same person at different points in time depending on circumstances, individual entrepreneurial intent is best assessed using a continuous rather than a categorical measurement approach (Thompson, 2009). SEI was operationalised as an attempt at new social enterprise activity or new enterprise creation, having social or community goals as its base, where the profit is invested in the activity or venture itself rather than returned to investors (Harding and Cowling, 2006). Items were sourced from previous research (Douglas and Shepherd, 2002) and slightly modified to address SE as conceptualised in this study (Sample items: I intend to set up a social venture in the future; I am always searching for social venture opportunities).

All items were measured along a five-point Likert-type scale, ranging from 'mostly disagree' = (1) to 'mostly agree' = (5), where respondents were required to indicate the extent of their agreement with each statement. In some instances items were reverse-coded in the scale analyses and the wording was adjusted to reflect an SE context. Since the study used a self-report questionnaire to capture the individual-level measures at one point in time, common method bias may affect empirical results and conclusions. A number of procedural and statistical steps were taken to minimise the risk. Procedurally, in order to reduce socially desirable responses and item ambiguity, the questionnaire featured specific, clear, concise items, with a 'counter-balanced' question order, and the respondents could choose to remain completely anonymous (Podsakoff *et al*., 2003: 888). Statistically, to ensure rigour in the results, all items relating to the IV

and DV variables were explored in a single principal component analysis (PCA), using Harman's one-factor test (Podsakoff *et al*., 2003) to check whether one component accounted for most of the variance. Seven components with eigenvalues greater than 1.0 were detected, accounting for 61 per cent of the variance. The largest component accounted for only 12 per cent. These results suggest that common method bias was not a serious concern in this study.

Data analysis techniques

Descriptive and inferential statistics were calculated using the STATISTICA software system StatSoft version 10 (2011). Apart from first establishing instrument validity and reliability, correlational, multiple regression and all-possible-subset regression analyses were performed. All-possible-subset regression is a method of selecting subsets of predictor variables in the regression model that considers all possible combinations to best predict the DV. All-possible-subset regression can be used as an alternative to, or in conjunction with, multiple and stepwise regression (Hair *et al*., 2010).

ANALYSIS AND RESULTS

Validity and reliability test results

To assess the scales' dimensional theoretical structures, exploratory factor analysis (EFA) was conducted. To establish whether the items used to measure the constructs accurately represented the constructs under investigation, factor loadings of ≥ 0.5 were regarded as significant (Hair *et al*., 2010). Principal component analysis with varimax rotation was used on the set of items, with the Bartlett's test of sphericity rendering a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (0.818), and an approximate Chi-square of 2707.185 with 703 degrees of freedom. The Bartlett's test of sphericity yielded significant ($p < 0.001$) Chi-square values and satisfactory KMO measures of sampling adequacy (> 0.80), indicating a high degree of common variance where the items are measuring a common factor.

After several attempts at factor analysis using the scree plot method of factor extraction, twelve factors with eigenvalues greater than one were obtained. However, some of the items did not load consistently or did not load at all. The loadings on two of the factors were extremely weak, and a ten-factor solution was subsequently extracted. Once again, however, the loading pattern was considered poor, as the eigenvalues for the factors were low for seven of the ten factors – only the first three factors explained more than 50 per cent of the total variance.

Consequently the total set of items were divided into those originally intended to measure the DV, as distinct from the items designed to measure the IVs, where two separate factor analyses were conducted using principal component analysis with varimax orthogonal rotation. Once again, prior to performing the factor analysis, the KMO (0.625) and Bartlett's test (Chi-square = 146.847; $p < 0.001$) results confirmed the adequacy of the items to perform factor analysis (see Table 1).

Eight factors were extracted for the DV and IVs, with five items loading relatively high onto the DV, which was intuitively and conceptually suitable. Even though one of the items for the DV had a modest loading, its content and wording were considered strongly applicable to measuring of 'SEI'. As mentioned, the items measuring the IVs were factor analysed separately. Several items did not load satisfactorily, or cross-loaded with other items, and these were subsequently eliminated. Table 2 shows the eight factors extracted, representing 54.01 per cent of the cumulative variance in the data.

The final results of the EFA are reported in Table 3, which shows all the grouped items where the factor loadings of ≥ 0.5 were retained and regarded as significant. Based on the results of the factor analysis, all the constructs as originally conceptualised were retained, apart from 'independence', which did not load satisfactorily (only one item loaded on this factor). As a result, H^1 could not be empirically addressed.

The extracted factors could be identified as the theoretical constructs of the following: (Factor 1) moral judgement and empathy, (Factor 2) SE intentions, (Factor 3) achievement, (Factor 4) self-efficacy, (Factor 5) social support, (Factor 6) vision, and (Factor 7) innovativeness. These results provide evidence of construct and discriminant validity for the scales measuring each of the constructs.

TABLE 1
FACTOR ANALYSIS APPROPRIATENESS STATISTICS

Kaiser-Meyer-Olkin measure of sampling adequacy		0.625
	Approx. Chi-square	146.847
Bartlett's test of sphericity	df	10.000
	Sig.	0.000

TABLE 2
EIGENVALUE PROPERTIES

Number of eigenvalues	Eigenvalue	% Total - variance	Cumulative – eigenvalue	Cumulative - %
1	5.842	18.257	5.842	18.257
2	2.572	8.036	8.414	26.293
3	1.808	5.648	10.221	31.941
4	1.682	5.257	11.903	37.198
5	1.565	4.890	13.468	42.088
6	1.431	4.472	14.899	46.559
7	1.268	3.961	16.166	50.520
8	1.118	3.492	17.284	54.013

To assess the reliability of the scales, Cronbach's alpha coefficients were calculated on the factors identified by the EFA (see Table 3). These alpha values exceed Nunnally's (1978) suggestion of 0.60 for exploratory research.

Descriptive statistics and correlations

The descriptive statistics of the factors are shown in Table 4, which provides a summary of central tendency, variability and skewness of the score distributions. The overall mean scores were relatively high, where the mean is the midpoint average on the 1-5 Likert scale. The highest mean score was for social support (M = 4.37, SD = 0.58), followed by SE intentions (M = 4.17, SD = 0.62). All the items also showed a negative skewness and kurtosis, indicating a clustering of scores at the high-end with a distribution that is relatively flat. However, with such a large sample, skewness tends not to make a substantive difference to the analysis. Nonetheless, using the results of the computations of the skewness and kurtosis indices, three indices were noted as being higher than the recommended absolute value thresholds. Consequently, transformations were applied to these factors to eliminate the effects of non-normality. Also in Table 4, Pearson product-moment correlations coefficients are shown for each of the scales, and are reported with their respective levels of significance. Several relatively strong ($r > 0.50$) and positive correlations among the variables that are statistically significant were observed.

Hypotheses testing: Regression analysis

The multiple regression results are displayed in Table 5. The results show that three IVs impact significantly on the DV, namely achievement, moral judgement and empathy, and self-efficacy. The amount of variance (R^2 = 42.4 per cent) explained by these factors means that the predictive and explanatory power of this model is fairly robust. Based on the statistically significant results, hypotheses H^2, H^3 and H^4 are supported.

Next, regressions of subsets comprising one to six predictor combinations are displayed in Table 6. From the results it is evident that three empirical factors have the greatest predictive power in terms of their standardised regression coefficient: vision and self-efficacy $\beta = 0.375$; social support $\beta = 0.273$; moral judgement and empathy $\beta = 0.272$. These three factors explain 50 percent of the variance in SE intentions ($R^2 = 0.50$).

Furthermore, when considering only the regressions with the subsets comprising one to two predictor combinations, the same three factors emerged as the strongest predictors of the DV. Finally, assumptions of the regression analysis results were tested by examining the normality of the residuals or prediction errors of the DV. Histograms showed normally distributed scores and variances with approximate homoscedastic levels across all levels of the predictors (not shown due to space limitations). Moreover, the raw and standardised residuals clustered closely around the diagonal lines in their respective normal probability plots. These observations attest to the normality of the residuals of the DV, providing additional support for the regression results.

DISCUSSION

This study responds to research calls to delve deeper into understanding SE intentions (Mair and Noboa, 2003). The purpose of the current study was to conduct empirical research in this emerging area of inquiry, in order to provide a contribution that would help a comprehensive theory of SE to emerge.

The study is distinctive in that it is one of the first empirical investigations in the South African context to determine which factors are aligned with SE intentions. The study provides a modest contribution towards understanding SE intentions by revealing that three factors account for the greatest amount of variance in explaining SE intentions, namely achievement, moral judgement and empathy, and self-efficacy.

TABLE 3
FACTOR STRUCTURE OF SCALES WITH RELIABILITIES REPORTED

Factor	Items	Cronbach's alpha	Factor 1 Moral judgement and empathy	Factor 2 Social entrepre-neurship intentions	Factor 3 Achieve-ment	Factor 4 Self-efficacy	Factor 5 Social support	Factor 6 Vision	Factor 1 Inno-vativeness
Factor 1	I believe morals, values and ethics are important for venture creation	0.69	**0.661**	-0.009	0.027	-0.056	0.024	0.220	0.185
	I believe SE can be used as a trigger for moral and social up-liftment		**0.601**	0.039	0.333	-0.003	0.092	-0.118	0.053
	I believe that profiting in a business can be done simultaneously while doing good		**0.525**	0.231	0.050	-0.004	-0.020	0.286	0.218
Factor 2	Becoming a social entrepreneur interests me very much	0.71	0.027	**0.837**	0.109	0.021	0.036	0.061	0.126
	Owning my own social venture would be a good career choice		0.086	**0.815**	-0.016	0.031	-0.035	0.228	-0.025
	Being a SE is more appealing than having a job		-0.041	**0.756**	-0.053	0.099	0.017	-0.175	-0.028
	I intend to set up a social venture in the future		-0.037	**0.537**	0.306	-0.008	0.208	-0.189	0.275
	I am always searching for social venture opportunities		0.147	**0.501**	0.354	0.121	0.130	-0.014	0.331
Factor 3	I prefer to work in situations which require high skill levels	0.61	-0.091	0.042	**0.770**	0.130	-0.023	0.125	-0.006
	I prefer to push myself to achieve goals which I have set		0.204	0.071	**0.768**	0.027	-0.022	-0.045	0.108
Factor 4	I am able to persevere when things go wrong	0.70	-0.029	-0.096	0.103	**0.706**	-0.055	0.127	0.161
	Failure does not easily get me down, instead it pushes me more to achieve my goal		0.135	0.182	0.142	**0.581**	0.311	0.111	0.134
	I believe I have the necessary competencies to run a social venture		-0.066	0.214	0.066	**0.573**	-0.254	-0.215	0.143
	I would be able to marshal the necessary resources to start a social venture		0.171	0.257	0.180	**0.552**	0.089	0.151	0.039
Factor 5	Networks which provide me with access to resources are important	0.62	0.036	-0.096	0.038	0.095	**0.642**	0.006	0.317
	I am able to form meaningful relationships with different stakeholders		-0.019	0.124	0.132	0.056	**0.638**	0.047	0.111
	A strong network is important for a social venture's development		0.275	0.127	-0.039	-0.029	**0.620**	-0.075	-0.095
	Forming social networks and business networks are necessary for venture creation		0.270	0.068	0.106	0.113	**0.658**	0.130	-0.029
Factor 6	I prefer taking the lead in a group or team when performing a task	0.63	0.007	0.106	0.062	0.112	0.065	**0.737**	-0.009
	Given the chance, I would make a good leader of people		0.226	0.226	0.041	0.160	-0.005	**0.578**	0.336
	Having a vision is important for a social entrepreneur		0.323	-0.004	0.048	0.273	-0.106	**0.527**	0.149
Factor 7	A social venture's success relies on a high degree of innovation	0.67	-0.286	0.196	0.341	-0.095	0.028	0.181	**0.581**
	Innovation is important in bringing about or adding social improvements		0.154	0.295	-0.126	0.372	-0.051	0.045	**0.647**
	I prefer to try the unconventional when engaged in venturing		0.262	0.463	0.039	0.109	-0.144	0.337	**0.511**
	I prefer working in situations that require a high degree of novelty		-0.211	0.188	0.433	-0.101	0.098	0.251	**0.577**

TABLE 4
DESCRIPTIVE STATISTICS AND CORRELATION MATRIX

	Mean	Std. Dev.	Social entrepreneurship intentions	Moral judgement and empathy	Achievement	Self-efficacy	Innovativeness	Social support	Vision
Social entrepreneurship intentions	4.17	0.62	1.000						
Moral judgement and empathy	4.04	0.71	0.521***	1.000					
Achievement	3.86	0.81	0.521***	0.248***	1.000				
Self-efficacy	3.36	1.01	0.281***	0.266***	0.222***	1.000			
Innovativeness	3.63	0.78	0.226***	0.197***	0.296***	0.219***	1.000		
Social support	4.37	0.58	0.491***	0.278***	0.117	0.142*	0.181***	1.000	
Vision	4.15	0.54	0.604***	0.461***	0.384***	0.209***	0.335***	0.380***	1.000

*p < 0.05; **p < 0.01; ***p < 0.001

TABLE 5
MULTIPLE REGRESSION RESULTS

Dependent variable: Social entrepreneurship intentions		**R-square = 0.424**	
Independent variables	**Beta (β)**	**t**	**Sig. (*p*)**
Vision	0.106	1.882	0.061
Social support	0.000	-0.002	0.999
Innovativeness	0.000	-0.003	0.998
Achievement	0.118	2.085	0.038*
Moral judgement and empathy	0.165	3.040	0.003***
Self-efficacy	0.104	1.777	0.047*

*p < 0.05; **p < 0.01; ***p < 0.001

TABLE 6
SUBSET REGRESSION RESULTS

R-square	No. of effects	Moral judgement and empathy	Achievement	Self-efficacy	Innovativeness	Social support	Vision
0.36	1						0.604
0.27	1	0.521					
0.24	1					0.491	
0.10	1		0.308				
0.08	1			0.281			
0.05	1				0.226		
0.44	2					0.305	0.488
0.44	2	0.308					0.462
0.40	2	0.416				0.375	
0.39	2			0.162			0.570
0.37	2		0.090				0.569
0.37	2				0.027		0.595
0.31	2	0.473	0.191				
0.30	2		0.254			0.461	
0.29	2	0.480		0.154			
0.29	2	0.495			0.128		
0.50	2	0.272				0.273	0.375
0.46	3			0.143		0.295	0.462
0.45	3		0.100			0.309	0.448
0.45	3	0.283		0.112			0.450
0.44	3				0.008	0.305	0.485
0.44	3	0.302	0.065				0.440
0.44	3	0.307			0.012		0.459
0.43	3	0.376	0.172			0.366	
0.42	3	0.385		0.127		0.366	
0.41	3	0.404			0.080	0.364	

This study adds to the literature by focusing on the antecedents of SE intentions. It complements established intention models by adding SE-specific insights. The focus of the study was deliberately on the antecedents of SE intention, rather than duplicating existing findings where there is much evidence that perceived desirability and feasibility explain intentions (Schlaegel and Koenig, 2014). Furthermore, the study takes place in an under-researched country, South Africa, where understanding the role that the antecedents play in shaping SE intentions – a multicultural non-western, predominantly necessity-based entrepreneurship context – may be considered valuable. Third, the formulated measurement instruments were tested for reliability and validity to assess the adequacy of these measures in the South African setting. Fourth, the study has implications for policy-makers who need to take into account which antecedents influence SE intentions, since they may require targeted interventions to increase overall SE activity.

It is interesting to note from the results of this study the importance of self-efficacy as an antecedent to SEI. Past research has found that those with higher self-efficacy perceive their environment as more filled with opportunities than fraught with risks, and they tend to believe in their ability to influence the realisation of their goals (Chen *et al*., 1998). Moreover, research confirms that higher levels of self-efficacy are directly related to entrepreneurial intent and engagement (Urban, 2013). Intentions capture the motivational factors that influence a behaviour: they are indications of how hard people are willing to try, or how much effort they are planning to exert, to perform the behaviour.

Similarly, the finding that achievement is a significant predictor of SE intent resonates with past studies where entrepreneurship as a goal-directed activity renders the need for achievement or achievement motivation an important phenomenon among social entrepreneurs (Baum *et al*., 2007). Allied to this goal, directed behaviour is the need to believe in one's ability and capability to implement the necessary personal resources, competencies and skills to realise these goals (Shane *et al*., 2003). Social entrepreneurs possess a vision to diminish the effects of social injustices, and key to this vision is the need for achievement. Due to this social change vision, the need for achievement is often more pronounced in social entrepreneurs than in commercial entrepreneurs (Mair and Marti, 2006). In considering that SE requires openness in the construction of meaning – which involves the internal deliberation of personal values/beliefs and social concerns, while making business and social sense (Allen *et al*., 2011) – it was not surprising that moral judgement and empathy were also found to be important predictors of SEI. This outcome is in line with earlier findings that the most important attributes setting social entrepreneurs apart from their commercial counterparts are their differing ideologies and psychological makeups, particularly in that social entrepreneurs tend to have higher levels of moral judgement and empathy (Mair and Marti, 2006). The mutually inclusive relationship between moral judgement and empathy means that the one attribute cannot exist without the other. These attributes are largely formed on the basis of the social entrepreneurs' ideology and life experiences, which are sustained by the philosophy of caring and compassionate acts, as opposed to greed and selfishness (Zahra *et al*., 2009).

The findings of this study also have contextual relevance where, despite the importance of social entrepreneurship, many individuals in emerging economies seem not to have the intention to pursue social activities. The Social Entrepreneurship Activity (SEA) research of the Global Entrepreneurship Monitor (GEM) is based on interviews with 150 000 adults in 49 countries (Bosma and Levie, 2009). The percentage of the population that is explicit about its involvement in social activities is an average of 2.8 per cent of the world's working-age adult population, but ranges considerably from 0.02 percent in Malaysia to 7.6 per cent in Argentina (Terjesen *et al*., 2011). When looking at different types of social entrepreneurs, those involved in NGOs form the lowest proportion of total SEA (less than 30 per cent) in developing countries such as Africa, as opposed to more developed economies like the US and European countries, where NGOs are more prevalent. A plausible reason for this discrepancy may be that individuals in wealthier countries, having satisfied their own basic needs, may be more likely to turn to the needs of others. In other words, the opportunity cost of social entrepreneurship may be higher in developing countries. On the other hand, social and environmental problems are often more prevalent in developing countries (Urban, 2015).

In terms of entrepreneurial activity in general, many individuals in emerging economies may have the desire to pursue entrepreneurial ventures, but they are not engaging because they lack self-belief and the requisite entrepreneurial skills (Urban, 2013).

Currently the educational system in South Africa is not leading to positive perceptions of personal feasibility and desirability as far as entrepreneurship is concerned, which has a negative impact on the size of the country's pool of intentional entrepreneurs (Turton and Herrington, 2013). Although a tradition of self-help and individual and collective responsibility predates the colonial era (Patel and Wilson, 2004), research confirms this lack of a 'can-do' attitude 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 also have low levels of self-belief and experience, an inadequate education, and a lack of access to finance and business-orientated networks (Turton and Herrington, 2013). Individuals need to perceive

themselves as capable and willing to be entrepreneurial. Research confirms that those with higher self-efficacy perceive their environment as more filled with opportunities than fraught with risks, and they tend to believe in their ability to realise their goals (Chen *et al*., 1998).

MANAGERIAL IMPLICATIONS AND RECOMMENDATIONS

Based on the themes in the literature and the empirical results emanating from this study, several implications are available for SE practitioners, educators and policy makers:

- Educational and training institutions are ideally placed to shape entrepreneurial intentions and aspirations among students in order to equip them adequately to survive in today's vigorous business environment (Urban, 2015). In this respect, many universities and colleges have positioned themselves as entrepreneurial hubs that create an environment that contributes to entrepreneurship development (Smith, 2011). Courses on entrepreneurship, and incubators located on campuses, have proved to be instrumental in developing students' desires and intentions to be entrepreneurial; particularly as exposure to entrepreneurship skills, knowledge and support increases the likelihood of students pursuing entrepreneurship as a viable career option (Turker and Selcuk, 2009).
- The practical implications of this study can be advanced to the classroom setting, where consideration of the antecedents identified in this study may enhance SEI by incorporating them in the design of curriculum and teaching methodologies.
- The articulation of the different antecedents to SE intentions provides a meaningful categorisation, where there is ample opportunity for curriculum designers to develop skill-building exercises and activities that target the various antecedents, such as self-efficacy. Unlike personality traits, self-efficacy can be developed through training and modelling. Efficacy judgements are task-specific, and regulate behaviour by determining task choices, effort and persistence. Self-efficacy also facilitates learning and task performance, particularly early in the learning process (Stevens and Gist, 1997). Self-efficacy can also change as a result of learning, experience and feedback (Gist and Mitchell, 1992). Research supports the notion of entrepreneurial development and youth entrepreneurship where teaching and training increases the levels of self-esteem and confidence in youths, leading to greater self-control over their lives in both the social and economic spheres (Urban, 2015).
- Aspiring social entrepreneurs, educators and government officials should all recognise the growing interest that is shown in the 'social economy', as an innovative way of incorporating economic activities into solutions for social needs and involving disadvantaged communities in the process of producing and consuming goods that carry social value (Nicholls, 2011). In fact, the social economy could pave the way to a more sustainable and fair society, and could possibly serve as a post-capitalist alternative.

LIMITATIONS AND FUTURE RESEARCH

The study is limited by the early stage of the theoretical development of SE intentions, its antecedents and related measures. Considering the relatively low Cronbach's alpha obtained (less than 0.70) for several of the scales used, these scales can be improved upon in future studies, and then tested for reliability and validity in the context of the education and training of social entrepreneurs.

Another limitation of the study is its cross-sectional, quantitative nature. The cross-sectional data used in the analysis prevents the regression model from demonstrating causation. However, predictive validity of the antecedent-intention relationship in intentional models is rare, even in the commercial start-up context (Urban, 2012). Hence, further research using longitudinal research designs is required to examine the antecedent-intention-behaviour link in an SE context.

Another direction for future research is the possibility of reverse causality. Prior research (Krueger *et al*., 2000) suggests that an increase in entrepreneurial intention may affect desirability and feasibility.

Consequently, future research should use more dynamic models and examine reverse causality when investigating motives, competencies and SE intentions. Theories of entrepreneurship that have focused on one-sided determinism, where either environmental or personality variables have been specified as unique predictors of entrepreneurship, have failed to capture the complexity of human action that encompasses the interaction of environmental, cognitive, and behavioural variables (Bandura, 2001). Considering that this study only examined individual-level factors, it is important for future studies to measure situational and cultural factors affecting SEI and their antecedents, to enhance an understanding of the reciprocal relationships between them.

REFERENCES

Adler, P.S. and Kwon, S.W. 2002. Social capital: prospects for a new concept. Academy of Management Review, 27: 17-40.

Ajzen, I. (1991). Theory of planned behaviour. Organisational Behaviour and Human Decision Processes, 50: 179-211.

Allen, R., Bedford, N. and Margitay-Becht, A. 2011. A "human ecology economics" framework for Eastern Europe. International Journal of Social Economics, 38(3): 192-208.

Audia, P.G., Locke, E.A. and Smith, K.G. 2000. The paradox of success: An archival and a laboratory study of strategic persistence following radical environmental change. Academy of Management Journal, 43(5): 837-853.

Austin, J., Stevenson, H. and Wei?Skillern, J. 2006. Social and commercial entrepreneurship: Same, different, or both? Entrepreneurship Theory and Practice, 30(1): 1-22.

Baierl, R., Grichnik, D., Sporrle, M. and Welpe, I.M. 2014. Antecedents of social entrepreneurial intentions: The role of an individual's general social appraisal. Journal of Social Entrepreneurship, 5(2): 123-145.

Bandura, A. 2001. Social cognitive theory: An agentic perspective. Annual Review of Psychology, 52(1): 1-26.

Baron, R.A. 2008. The role of affect in the entrepreneurial process. Academy of Management Review, 33(2): 328-340.

Baum, J., Frese, M. and Baron, R. 2007. The psychology of entrepreneurship. SIOP Organizational Frontiers Series. New York: Lawrence Erlbaum Associates Inc.

Bird, B. 1988. Implementing entrepreneurial ideas: The case for intention. The Academy of Management Review, 13 (3): 442-453.

Boschee, J. 2001. Eight basic principles for non-profit entrepreneurs. Nonprofit World, 19 (4): 15-18.

Bosma, N. and Levie, J. 2009. Global Entrepreneurship Monitor. Global Report. Babson: MA: Babson College.

Bosma, N., Wennekers, S. and Amorós, J.E. 2012. Global Entrepreneurship Monitor. 2011 Extended Report: Entrepreneurs and Entrepreneurial Employees Across the Globe. London: Global Entrepreneurship Research Association (GERA).

Boyd, N.G. and Vozikis, G.S. 1994. The influence of self-efficacy on the development of entrepreneurial intentions and actions. Entrepreneurship Theory and Practice, 18(4): 63-78.

Carsrud, A. and Brännback, M. 2011. Entrepreneurial motivations: What do we still need to know? Journal of Small Business Management, 49(1): 9-26.

Chen, C.C., Greene, P.G. and Crick, A. 1998. Does entrepreneurial self-efficacy distinguish entrepre-neurs from managers? Journal of Business Venturing, 13(4): 295-316.

Copeland, R., Francia, A. and Strawser, R. 1973. Students as subjects in behavioural research. Accounting Review, 48: 365-372.

De Noble, A.F., Jung, D. and Ehrlich, S.B. 1999. Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurial action. Frontiers of Entrepreneurship Research, 4: 73-87.

Dees, J.D. 2001. The Meaningof Social Entrepreneurship. Center for Advancement of Social Entrepreneurship (CASE). Fuqua School of Business, Duke University.

Dipboye, R. and Flanagan, M. 1979. Research setting in industrial and organizational psychology: Are findings in the field more generalizable than in the laboratory? American Psychologist, 34: 141-150.

Douglas, E.J. and Shepherd, D.A. 2002. Self-employment as a career choice: Attitudes, entrepreneurial intentions, and utility maximization. Entrepreneurship Theory and Practice, 26(3): 81-90.

Drucker, P. 1979. The Practice of Management. London: Pan Books.

Earley, P.C. 1994. Self or group? Cultural effects of training on self-efficacy and performance. Administrative Science Quarterly, 39(1): 89-117.

Fitzsimmons, J.R. and Douglas, E.J. 2011. Interaction between feasibility and desirability in the formation of entrepreneurial intentions. Journal of Business Venturing, 26: 431-440.

Gist, M.E. and Mitchell, T.R. 1992. Self-efficacy: A theoretical analysis of its determinants and malleability. Academy of Management Review, 17(2): 183-212.

Greenberg, J. 1987. The college sophomore as a guinea pig: Setting the record straight. Academy of Management Review, 12: 157-159.

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (eds.). 2010. Multivariate Data Analysis: A Global Perspective (7th edn.). Upper Saddle River, NJ: Pearson.

Harding, R. 2006. Social Entrepreneurship Monitor. Global Entrepreneurship Monitor Report 2005. London: London Business School.

Harding, R. and Cowling, M. 2006. Social Entrepreneurship Monitor. Global Entrepreneurship Monitor Report. London: London Business School.

Harris, M.L. and Gibson, S.G. 2008. Examining the entrepreneurial attitudes of US business students. Education and Training, 50(7): 568-581.

Hemmasi, M. and Hoelscher, M. 2005. Entrepreneurship research, using students as proxies for actual entrepreneurs. Journal of Entrepreneurship Education, 8: 49-59.

Jeffs, L. 2006. Social Entrepreneurs and Social Enterprises: "Do they have a Future in New Zealand?". Paper read at the International Council for Small Business Conference (ICSB), Melbourne, June 03-05.

Johnson, S. 2000. Literature review on social entrepreneurship. Canadian Centre for Social Entrepreneurship, 16:1-4.

Kim, M. and Hunter, J. 1993. Relationships among attitudes, intentions and behaviour. Communications Research, 20: 331-64.

Koh, H.C. 1996. Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students. Journal of Managerial Psychology, 11(3): 12-25.

Krueger, N.F. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. Entrepreneurship Theory and Practice, 18(1): 5-23.

Krueger, N.F. and Brazael, D.V., 1994. Entrepreneurial potential and potential entrepreneurs. Entrepreneurship Theory and Practice, 18(3): 91-105.

Krueger Jr, N.F., Reilly, M.D. and Carsrud, A.L. 2000. Competing models of entrepreneurial intentions. Journal of Business Venturing, 15(5): 411-432.

Liñán, F., Nabi, G. and Krueger, N. 2012. British and Spanish entrepreneurial intentions: A comparative study. Revista de Economía Mundial, 33: 73-103.

Mair, J. and Marti, I. 2006. Social entrepreneurship research: A source of explanation, prediction, and delight. Journal of World Business, 41(1): 36-44.

Mair, J. and Noboa, E. 2003. Social Entrepreneurship: How intentions to create a Social Enterprise get formed. WP No 521. Universidad de Navarra, Barcelona: IESE Business School.

Mair, J. and Noboa, E. 2006. Social entrepreneurship: How intentions to create a social venture are formed. Social Entrepreneurship, 11: 121-135.

Mcshane, S. and Von Glinow, M. 2003. Organizational behavior: Emerging knowledge and practice for the real world. Harvard Business Review, 79: 80-90.

Mirabella, R.M., Gemelli, G., Malcolm, M.J. and Berger, G. 2007. Nonprofit and philanthropic studies: International overview of the field in Africa, Canada, Latin America, Asia, the Pacific, and Europe. Nonprofit and Voluntary Sector Quarterly, 36(4): 110S-135S.

Nga, J.K.H. and Shamuganathan, G. 2010. The influence of personality traits and demographic factors on social entrepreneurship start up intentions. Journal of Business Ethics, 95(2): 259-282.

Nicholls, A. 2005. Social Entrepreneurship: New Models of Sustainable Social Change. Oxford: Oxford University Press.

Nicholls, A. 2011. Editorial: social enterprise–at the forefront of rethinking business? Journal of Social Entrepreneurship, 2(1): 1-6.

Nunnally, J.C. 1978. Psychometric Theory (2nd edn.). New York: McGraw-Hill.

Patel, L. and Wilson, T. 2004. Civic service in sub-Saharan Africa. Nonprofit and Voluntary Sector Quarterly, 33 (4): 22-38.

Peredo, A.M. and Chrisman, J.J. 2006. Toward a theory of community-based enterprise. Academy of Management Review, 31(2): 309-328.

Podsakoff, P.M., Mackenzie, S.B., Lee, J.Y. and Podsakoff, N.P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies, Journal of Applied Psychology, 88(5): 879-903.

Prabhu, G.N. 1999. Social entrepreneurial leadership. Career Development International, 4(3): 140-145.

Robinson, P., Huefner, J. and Hunt, K. 1991. Entrepreneurial research on student subjects does not generalize to real world entrepreneurs. Journal of Small Business Management, 29: 42-50.

Roper, J. and Cheney, G. 2005. The meanings of social entrepreneurship today. Corporate Governance, 5(3): 95-104.

Rousseau, G.G. and Venter, D.J.L. 2009. Investigating the importance of factors related to career choice. Management Dynamics, 18(3): 2-14.

Rwigema, H., Urban, B. and Venter, R. 2010. Entrepreneurship: Theory in Practice (2nd edn.). Johannesburg: Oxford University Press Southern Africa.

Saunders, M.N., Saunders, M., Lewis, P. and Thornhill, A. 2011. Research Methods for Business Students (5th edn.). New Delhi, India: Pearson Education.

Scherer, F.R., Adams, J.S., Carley, S.S. and Wiebe, F.A. 1989. Role model performance effects on development of entrepreneurial career preference. Entrepreneurship Theory and Practice, 24: 53-71.

Schlaegel. C. and Koenig, M. 2014. Determinants of entrepreneurial intent: A meta-analytic test and integration of competing models. Entrepreneurship Theory and Practice, March, 291- 332.

Seelos, C. and Mair, J. 2005. Social entrepreneurship: Creating new business models to serve the poor. Business Horizons, 48(3): 241-246.

Shane, S., Locke, E.A. and Collins, C.J. 2003. Entrepreneurial motivation. Human Resource Management Review, 13(2): 257-279.

Shane, S.A. 2003. A General Theory of Entrepreneurship: The Individual-Opportunity Nexus. New York: Edward Elgar Publishing.

Shapero, A. and Sokol, L. 1982. The Social Dimensions of Entrepreneurship. In Kent, C., Sexton D. and Vesper, K.H. (eds.). The Encyclopaedia of Entrepreneurship. New Jersey: Englewood Cliffs, 77-90.

Shaw, E. and Carter, S. 2007. Social entrepreneurship: Theoretical antecedents and empirical analysis of entrepreneurial processes and outcomes. Journal of Small Business and Enterprise Development, 14(3): 418-434.

Sieger, P., Fueglistaller, U. and Zellweger, T. 2011. Entrepreneurial Intentions and Activities of Students across the World. International Report of the GUESSS Project 2011. St Gallen: Swiss Research Institute of Small Business and Entrepreneurship at the University of St Gallen.

Smith, J.M. 2011. Connecting Young South Africans to Opportunity: Literature Review and Strategy. The DG Murray Trust. Johannesburg: February.

Statsoft, I. 2011. Statistica. (Version 10) StatSoft Inc. Available: http://www.statsoft.com.aspx [Accessed: 18th September 2013].

Stevens, C.K. and Gist, M.E. 1997. Effects of self-efficacy and goal-oriented training on negotiation skill maintenance: What are the mechanisms? Personnel Psychology, Winter, 50(4): 955-979.

Stewart, W.H. and Roth, P.L. 2007. A meta-analysis of achievement motivation differences between entrepreneurs and managers. Journal of Small Business Management, 45(4): 401-421.

Terjesen, S., Lepoutre, J., Justo, R. and Bosma, N. 2011. Global Entrepreneurship Monitor Report on Social Entrepreneurship. Global Entrepreneurship Research Association (GERA). Babson College, Babson Park, MA, United States.

Thompson, E.R. 2009. Construct clarification and development of an internationally reliable metric. Entrepreneurship Theory and Practice, 33(3): 669-694.

Thompson, J., Alvy, G. and Lees, A. 2000. Social entrepreneurship – A new look at the people and the potential. Management Decision, 38(5): 328-338.

Turker, D. and Selcuk, S.S. 2009. Which factors affect entrepreneurial intention of university students? Journal of European Industrial Training, 33(2): 142-159.

Turton, N. and Herrington, M. 2013. Global Entrepreneurship Monitor. 2012 Report South Africa. Cape Town: UCT.

Urban, B. 2008. Social entrepreneurship in South Africa: Delineating the construct with associated skills. International Journal of Entrepreneurial Behaviour and Research, 14(5): 346-364.

Urban, B. 2012. A metacognitive approach to explaining entrepreneurial intentions. Management Dynamics, 21(2): 16-33.

Urban, B. 2013. Social entrepreneurship in an emerging economy: A focus on the institutional environment and SESE. Managing Global Transitions: An International Research Journal, 11(4): 3-25.

Urban, B. 2015. Evaluation of social enterprise outcomes and self-efficacy. International Journal of Social Economics, 42 (2): 163-178.

Vecchio, R.P. 2003. Entrepreneurship and leadership: Common trends and common threads. Human Resource Management Review, 13(2): 303-327.

Weerawardena, J. and Mort, G.S. 2006. Investigating social entrepreneurship: A multidimensional model. Journal of World Business, 41(1): 21-35.

Zahra, S.A., Gedajlovic, E., Neubaum, D.O. and Shulman, J.M. 2009. A typology of social entrepreneurs: Motives, search processes and ethical challenges. Journal of Business Venturing, 24(5): 519-532.

* To whom all correspondence should be addressed: Prof Boris Urban, Chair in Entrepreneurship, Wits Graduate School of Business Administration, boris.urban@wits.ac.za