The influence of institutional environmental factors on social entrepreneurial intentions among tertiary-level students in South Africa

Keresia Leann Kujinga

Prof Boris Urban

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

Johannesburg, 2016

ABSTRACT

Social entrepreneurship has the potential to address and solve social problems and challenges, poverty and inequality among others, which are rife across sub-Saharan Africa. This academic field holds great potential, is surprisingly under researched and lagging behind in practise. A study of the influence of perceptions within the institutional environment on the decision to become a social entrepreneur is therefore critical in developing an understanding of social entrepreneurial intentions in the context of a developing and emerging economy. This study proposed to use the theory of entrepreneurial event and the institutional theory to investigate the influence of the external environment on the development of social entrepreneurial intentions and its antecedents among tertiary level students in Gauteng, South Africa.

This study was quantitative and cross sectional in nature; a structured and closed-ended questionnaire was distributed electronically to the target population. 193 students participated in this study, with the final sample consisting of 128 responses. In order to analyse the data, linear multiple regression was employed.

The key findings indicated that the regulatory environment has a positive and significant influence on perceived feasibility and social entrepreneurial intentions. Moreover, the findings indicated that the normative and cognitive environment have a positive but insignificant relationship with social entrepreneurship intention and its antecedents – perceived feasibility and perceived desirability. There is a negative relationship between the regulatory environment and perceived desirability, normative environment and social entrepreneurship intention, cognitive environment, perceived desirability and social entrepreneurship intention.

The implications of this research for policy makers and educators is to focus on shaping the perceptions of the institutional environment as well social entrepreneurship, and the attitudes of students and society at large towards positive perceptions to influence social entrepreneurial intentions.

DECLARATION

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

Keresia Leann Kujinga

Signed at Johannesburg

On the _____ day of _____ 2016.

DEDICATION

To my family, who believed in me and stood by me in this quest for knowledge - for empowering me be the best I can be, to pursue my dreams and to do whatsoever my hand findeth, as if it were for the Lord.

ACKNOWLEDGEMENTS

The quest for knowledge led me on a journey, a journey so empowering and yet humbling. This journey would not have been a success without the people who supported and believed in me. I would like to acknowledge and thank these special people for their unwavering support that has seen me through.

Professor Boris Urban, my supervisor, thank you for your guidance, insights and encouragement.

My employer and my colleagues at WK Wilton Inc, Katy and Keith, I am indebted for your support of my ambitions to pursue this Master's degree, thank you for believing in me when I ceased to believe in myself.

Honest Muchabaiwa, the statistician, thank you for your patience and assistance, your dedication to assisting me through this research process is greatly appreciated

Angie, the editor – thank you for your hard work and feedback into making this research document final.

The staff at WBS, the lecturers for MMENVC, I am grateful for your assistance and support.

My classmates – the quest for knowledge allowed the paths of strangers to cross, and through experience, we became esteemed friends. Thank you for the encouragement, support and love – indeed none of us is better than all of us.

Finally, there is a group of people who deserves a special mention for making my journey worthwhile, classmates turned close friends, "The Treasure Chest" – Tiisetso, Ken and James, the laughter, the arguments, the madness, the late nights have paid off. Eureka!!!!!

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

Social entrepreneurship (SE) has gained much attention in Africa in recent years (Rivera-Santos, Holt, Littlewood & Kolk, 2015); however, a gap exists on understanding the role, impact and influence of the institutional environmental factors on social entrepreneurial intention (SEI) and its antecedents. Institutions are important for providing guidance, creating and allowing routines and for reducing uncertainty in social interaction (North, 1990; Suatet, 2005). Institutions can be classified into formal, informal, and according to dimension: regulatory, cognitive and normative (Suatet, 2005; Urbano, Toledano & Soriano, 2010).

Empirical research has shown evidence of the relationship between the environmental context and entrepreneurship emergence as well as activity. In the recent past, contextual environment research has shifted towards the institutional theory and the implications on entrepreneurial activity (Urban, 2008). Research on SEI will improve the understanding of the antecedents of SEI and behaviour (Mair & Noboa, 2003).

This research aimed at adding to the discipline of SE in South Africa by assessing the dynamic influences of the South African institutional environment on SEI and its antecedents. An understanding of the influence of the context is critical towards a development of the social enterprise sector and policy in South Africa. This study will seek to explore the influence of the South African dynamic environment and context by focusing on the institutional environment in South Africa and its influence on the antecedents of SEIs.

This study is employs the institutional theory in contextualising SE. According to North (1990), as cited in Urban (2008), institutions provide a framework for the interaction of human systems. There are formal and informal institutions, which include rules and regulations as well as values and norms (Griffiths, Gundry & Kickul, 2013). Although, there is substantial research conducted on the antecedents of entrepreneurial activity, very limited research is available in

developing economies to investigate the influence of environment on dimensions and development of entrepreneurship (Bowen & De Clerq, 2008). Xheneti and Bartlett (2012) further argue that institutional elements are important, imposing stability and structure in the economy, their research in Albania showed that inconsistency and high costs of compliance can act as barriers to entrepreneurship; the regulatory environment was identified as a barrier to business development.

Ntayi, Mutebi, Kamanyi and Byangwa (2013) posit that research on institutional frameworks and their impact on entrepreneurial behaviour have not addressed country specific profiles. In their view, institutional profiles differ significantly across sub-Saharan Africa and these differences account for the varying levels in early stage total entrepreneurial activity (TEA). Research focused on emerging market contexts is useful in understanding institutional profiles of developing markets, as studies in this field have validated the instrument and theory in a developed market context (Thoumrungroje, 2010).

The formation of SEIs is critical for the understanding of social entrepreneurship activity (SEA) in sub-Saharan Africa. Bird, (1988) suggests that the best predictor for behaviour is intent; therefore, a contextual understanding is critical to the field. The external environment indirectly facilitates or hinders entrepreneurial activities and intentions; when individuals perceive the external environment as supportive, they are most likely to exhibit entrepreneurial intentions (Karimi, Biemans, Naderi Mahdei, Lans, Chizari & Mulder, 2015).

1.1 Purpose and aim of the study

This study drew from empirical studies and theory to investigate the South African institutional profile and its influence/impact on SEI and its antecedents. There is a growing need in SE research in sub-Saharan Africa for an empirical investigation into the formation and perceptions of SEIs. The aim of this research was to assess the impact that perceptions had on the institutional environmental factors in South Africa and how these influence the decision to become a social entrepreneur.

1.2 Context of the study

Africa has widespread social challenges and needs, which create opportunities for innovative ideas to solve such social challenges (Rivera-Santos et al., 2015). Rivera-Santos et al. (2015) further suggest that acute poverty, informality, political history and ethnic group identity are the four contextual dimensions influencing SE in sub-Saharan Africa.

The number of social enterprises in the past decade has increased significantly; however, limited research exists on the contexts in developing and emerging economies (Littlewood & Holt, 2015; Viviers, Venter & Solomon, 2012). Despite the growing need and importance of SE, research has shown thatmany individuals in emerging economies have low intentions to pursue social activities (Urban, 2013; Viviers et al., 2012).

Ntayi et al. (2013) examined the institutional framing in Uganda providing a sub-Saharan context riddled with the low TEA levels as indicated in the Global Entrepreneurship Monitor (GEM) report for sub-Saharan Africa (Turton & Herrington, 2013). In their study, they concluded that the institutional environment influenced the formation of intentions and entrepreneurial behaviour.

According to the SE GEM (Bosma & Levie, 2009), South Africa experiences a low TEA rate and a low SEA rate in comparison to other countries in sub-Saharan Africa. This research sought to identify the institutional framing for South Africa as well as its influence on SEI and its antecedents. An assessment of the SEI of tertiary level students in the emerging economy context expands the knowledge base in the field of SE.

1.3 Problem statement

Mair and Marti (2006) explain that entrepreneurial intentions are influenced by the continuous interaction between social entrepreneurs and their context. This view is consistent with Mair and Noboa (2003) who suggest that context has an

influence on the formation of SEI and its antecedents – feasibility and desirability. A gap exists in literature in the field of SE in the emerging economies context and particularly the factors influencing the formation of SEI (Ayob, Yap, Rashid, Sapuan & Zabid; 2013). Empirical investigations are required to uncover the formation of SEI and its antecedents (Baierl, Grichnik, Sporrle & Welpe, 2014). South Africa has the lowest rate of entrepreneurial activity as well as entrepreneurial intentions among its youth (15 percent) as compared to other sub-Saharan African countries averaging 56 percent (Turton & Herrington, 2013). It is therefore important to establish the influence of the contextual environment on the formation of social entrepreneurial intentions.

1.3.1 Research question and hypotheses

What is the impact of the perceptions of institutional environment on an individual's decision to become a social entrepreneur, i.e., SEI and its antecedents – perceptions of feasibility and desirability?

Hypothesis 1: Perceptions of the regulatory environment influences SEI through a) perception of feasibility, and b) perception of desirability.

Hypothesis 2: Perceptions of the normative environment influences SEI through a) perception of feasibility, and b) perception of desirability.

Hypothesis 3: Perceptions of the cognitive environment influences SEI through a) perception of feasibility, and b) perception of desirability.

Hypothesis 4: There is a positive relationship between perceptions of desirability and SEIs.

Hypothesis 5: There is a positive relationship between perceptions of feasibility and SEIs.

1.4 Definition of terms

- *Institutional framing:* This refers to the three-dimensional institutional theory constructs of regulatory, cognitive and normative dimensions of the environment (Busenitz, Gomez & Spencer 2000; Manalova, Eunni & Gyochev, 2007).

- *Regulatory environment:* This refers to formal rules as well as incentives which constrain and regularise entrepreneurial behaviour (Seelos, Mair, Battilana & Tina Dacin, 2011:335).

- *Cognitive environment:* The templates and scripts shared among a community or nation (Seelos et al., 2011).

- *Normative environment:* The degree to which a country's residents admire and perceive entrepreneurial thinking and innovative activities as important (Busenitz et al., 2000).

- *Social entrepreneurship (SE):* "entrepreneurial activity with embedded social purpose" (Austin, Stevenson, & Wei-Skillen, 2006:1). SE and social enterprise was used interchangeably, with the same acronym, SE.

- *Social entrepreneurial intention (SEI):* The probability of starting a social entrepreneurial venture (Krueger, 1993; Weerakoon & Gunatissa, 2014). EI was used as an acronym for entrepreneurial intention.

- *Perceived desirability:* The individuals' assessment of the attractiveness of performing a particular behaviour (Weerakoon & Gunatissa, 2014).

- *Perceived feasibility:* The extent to which an individual believes in their own ability to create a social venture (Mair & Noboa, 2003).

1.5 Contribution of the study

There have been recent calls for research on SEI in emerging and developing economies particularly the SE phenomenon from a context and institutional

perspective. The low levels of SEA warrant further research in this field in order to uncover underlying contributors (Terjesen, Lepoutre, Justo & Bosma, 2012). This study underscored the influence of the institutional environment on the formation of SEI to add to the discipline pin the context of sub-Saharan Africa, particularly South Africa.

An understanding of SEI is critical in developing economies, as the need for sustainable and economic development has become critical to counter the social challenges that these economies continually face (Ayob et al., 2013). Further to that, this research sought to add to the understanding of SE in South Africa by focusing on contextual factors and building on empirical research by Mair and Noboa (2003), Turton and Herrington (2013), and Urban (2013).

Available research in South Africa suggests that there is lack of entrepreneurial skills, low total entrepreneurial intentions and activity and a lack of institutional support for social entrepreneurs (Turton & Herrington, 2013; Urban, 2013). By focusing this study on contextual factors and their influence on SEI and its antecedents, this study underscored a valuable body of knowledge for academia. This research provided empirical evidence and added to the body of knowledge on SE contexts of sub-Saharan Africa.

SE research is limited in South Africa and this area of study is relatively novel, nevertheless it adds to what is known about SE in sub-Saharan Africa. By focusing and factors influencing the development, the findings of this study can have important implications for educators and policy makers who can influence the formation and development of SEI (Harding & Cowling, 2006).

1.6 Ethical considerations

The Ethics Board prescribes procedures and ethical conduct; these were adhered to when this research was conducted. The objective of ethics in research is to ensure that “no harm occurs” financially or emotional (Yin, 1994:65). Informed consent of the respondents was sought through a cover letter for the research instrument, which informed the respondents of the

objective of the study as well as the maintenance of their privacy and confidentiality.

The data for the research was kept confidential and destroyed upon completion of the analysis. The respondents remained anonymous as no names or identification of any sort was requested in the research instrument itself.

CHAPTER 2: LITERATURE REVIEW

In this chapter, conceptual definitions of SE are discussed; the institutional economic theory, entrepreneurial intent (EI) models, and the nexus of institutional theory and entrepreneurial intentions in the context of emerging economies, particularly South Africa are examined. Once the theoretical foundations are laid, hypotheses will be formulated in respect of institutional environmental factors, SEIs and its antecedents – perceived feasibility and perceived desirability. Lastly, a model for the research is proposed in order to express graphically the association of the proposed constructs, independent and dependent variables.

2.1 Introduction

Entrepreneurship is a relevant tool for sustainable growth and as such, the factors that determine the decision to become an entrepreneur (social) are of much concern to developing economies especially in sub- Saharan Africa (Linan, Rodriguez-Cohard and Rueda-Cantuche, 2005). This study investigated the influences of the institutional environmental dimensions on the resolution to become a social entrepreneur.

Various approaches have been utilised by researchers to understand and examine the field of entrepreneurship, these include the trait, behavioural and cognitive approaches, among others. In Malaysia, research by Pihie, Akmaliah and Hisyamuddin (2009) indicated that although the environment was conducive to the creation and development of intention the individuals were not confident enough to establish businesses, while a study in China showed that parental consent mediated the relationship between self-efficacy and intention.

In Europe, research on the development on entrepreneurial intentions was conducted by Leroy, Maes, Sels and Debrulle (2009); they focused on the gender differences affecting intention, their findings indicate that Belgian males are more inclined to be entrepreneurial and they are motivated by creativity and

succeeding; whereas, women who exhibit entrepreneurial intent are influenced by self-efficacy (capabilities and know-how). In 2008, Linan utilised the Ajzen (1991) theory of planned behaviour (TPB) in order to assess the role of individual perception on entrepreneurial intentions. In order to understand student SE intentions, the study by Viviers et al. (2012) interrogated the nature of environmental/social missions that South African students would be interested in pursuing. Recycling, and education and training emerged as the most prominent social missions that the students would be interested in pursuing (Viviers et al., 2012).

The field of SE has developed over time, especially the past decade as increased numbers of social enterprises have emerged in South Africa (Littlewood & Holt, 2015). Despite these developments in SE, very little is known about how SEI is formed and the influence of the environment. South Africa exhibits the most notable development among other countries in sub-Saharan Africa. The following section discusses conceptual matters relating to SE in South Africa.

2.2 SE – nature and conceptual definition

There are a growing number of people across communities who have become socially aware of challenges such as social exclusion, injustice and poverty (M. Dacin, P. Dacin & Tracey, 2011; Harding, 2007). The past few decades have seen an increase in the number of high profile individuals – politicians and celebrities around the world as well as organisations such as Ashoka, successfully attracting the attention of the greater populace to SE.

Scholars conceptualise SE as innovative activity with social objectives, this notion suggests a combination of business expertise and the development of innovative approaches to earn income for non-profit organisations (Austin, Stevenson & Wei-Skillern, 2006). (Cho, 2006) further argues that Social entrepreneurship has the potential to improve human lives and as an avenue for social change. Peter Drucker (1979;p.453) as cited in (Cho, 2006) discussed

the concept of social enterprise as encompassing the act of private organs of society which serve a social function.

SE emerges to address social challenges, market failures that government and the private sector neglect. SE refers to “a process that brings social change and addresses important social needs” (Lekhanya, 2015:65). SE is conceptualised as the actions of individuals aimed at creating tangible outcomes, this approach identifies three important elements of SE, the social entrepreneur, their behaviour, and the outcomes of their actions.

It is further argued that social entrepreneurs engage in innovative activities in order to yield social benefits and that their core motivation is “altruism or helping behaviour” (Mair & Noboa, 2003:2). SE is defined as an attempt at starting a new social enterprise as well as activities aimed as extending existing solutions for more impact (Harding & Cowling, 2006; Urban, 2015).

SE theory is grounded on entrepreneurship theory founded by authors such as Say, Schumpeter, Drucker and Stevenson in the earlier centuries. Urbano et al. (2010) summarise the three broad conceptualisations in SE literature as follows:

a) SE as economic, social and environmental activities aimed at address social needs;

b) The contextual differences in approach in which SEs are classified as non-governmental sector, faith based, non-profit activities; and

c) Lastly, with reference to how social mission addresses social challenges, while placing emphasis on innovativeness, risk orientation and proactive solutions.

Dacin et al. (2011) proposes that a definition for SE that focuses on individual level characteristics or processes and a mission that creates a platform of debate as to what these characteristics should or should not be, further drifting away from the objective. The researchers adopt a definition that makes reference to the mission of the social entrepreneur, focus on finding solutions

for social challenges, further arguing that this definition “holds the most promise for the field” (Dacin et al., 2011:1204).

SE and entrepreneurship are distinguished by the mission – where SE is concerned with social value creation; commercial entrepreneurship is preoccupied with the creation of economic value for personal gain (Austin et al., 2006). A notable distinction between business entrepreneurship and social entrepreneurship is the marshalling of resources by the latter with the aim of serving the social needs innovatively where the former is concerned with high risk, profitable endeavours (Chell, 2007)

Until the most recent years entrepreneurship was considered to be operational on a commercial domain (Austin, et al., 2006) with models and definition omitting the social perspective. The pursuit of opportunities to create economic value is applicable only to the economic entrepreneurship. A commonality that arises across the definition of social entrepreneurship is one of ‘problem solving’, researchers agree that the core theme of social entrepreneurship is the identification and commitment to problem solving. (Galera & Borzaga, 2009) Social entrepreneurship is the use of entrepreneurial approaches to solve social problems (Dees, 1998)

An approach to social entrepreneurship in which the primary drive is to meet social mission and outcomes at the expense of surplus that can be reinvested to ensure sustainability of the entrepreneurship, the social enterprises require grant and donations to survive and wealth creation is discouraged on principle. The second view to social entrepreneurship places emphasis the ability of the venture to be sustainable through commercial activities undertaken by the social enterprise, a clear distinction is drawn between charitable social enterprises and those that create social benefit. Enterprises that depend on a mix of donations and commercial activities has a ‘double’ bottom line.

Social enterprises behave entrepreneurially, in support of this view, (Chell, 2007) argues that the definition of social entrepreneurship should reflect this

notion. Chell (2007) further suggests the following definition, “creation and pursuit of opportunities relentlessly without regard to the alienable resources currently controlled, with a view to both creating wealth that may be reinvested into the to ensure its sustainability and social value”. This view provides a realistic view of the plethora of social ventures that pursue commercial as well as social objectives and that social entrepreneurs behave entrepreneurially during the process of value creation. The social entrepreneurship domain has over the years become highly competitive as social entrepreneurs compete for funding and donations.

Cho (2006) presents the argument that social objectives when addressed in the context of geographical, economic, cultural, political temporary boundaries of the society produces divergent views of what a social good entails as well as interventions associated with it.Cho (2006) puts forward the notion that Social entrepreneurship is a political phenomenon and social entrepreneurs need to embrace the political linkages and values that are embedded within their social entrepreneurship activities. A simplistic definition of social entrepreneurship is developed by (Cho, 2006) ,“ a set of institutional practices combining the pursuit of financial objectives with the pursuit and promotion of substantive and terminal values.

There is much scepticism around the value add of SE as a field of inquiry. Sceptics of SE point out conceptual issues relating to the definitions and clarity as a significant threat to the validity of the concept as an academic field (Dey, 2006). A conceptual paper, authored by Dacin et al. (2011), sought to highlight and uncover the importance of SE as an academic field, highlighting critical issues, opportunities and challenges for future scholars to consider.

2.2.1 Social entrepreneurs

Social entrepreneurs are “people who realise where there is an opportunity to satisfy some unmet need that the state welfare system cannot and will not meet” (Thompson, Alvy & Lees, 2000:328). Dees and Economy (2001) adds to this understanding by defining the entrepreneur as an agent of change within

the social sector, who adopts social value creation as a mission. The social entrepreneur is an extraordinary person with a vision for social change; they revolutionaries with a mission, applying the principles of Schumpeter (Roberts & Woods, 2005).

2.3 SE and the context

The concept of environmental context is focused on theexternal environment, which includes the political, economic, social and cultural trends, which may influence the emergence and implementation of entrepreneurship. . This view suggests that , it is important to consider context and its influence on entrepreneurship in all its forms. The institutional approach framework approach (North, 1990:3) refers to the environment as “human devised constraints that shape interactions”. These institutions could either be formal, regulatory and political; or informal, values and norms (Ferri & Urbano, 2015). Institutional factors are essential in the pursuit and implementation of SE.

The environment influences SE and in turn SE influences its environment (Bernardino, Santos & Ribeiro, 2015), this view implies a dynamic relationship. In order to understand SE, contextual factors influencing emergence and implementation need to be considered. In this study, the institutional environment approach was used in order to understand this phenomenon. Consistent with the open system by Katz and Kahn (1966), which highlights the interaction between entrepreneurs and the environment, argues that entrepreneurship (social) is strongly influenced by the environment (Bernardino et al., 2015). By understanding the complex relationship of how SE is influenced by the environment, critical elements for the emergence and development of SE are identified across different contexts.

Scholars suggest that, SE is context embedded, this view implies that the emergence and implementation of SE differs across different contexts; this study sought to understand how SE developed in an emerging economy context. Empirical research suggests that entrepreneurial activities are influenced by context and that institutional environments that develop over time

determine and shape perceptions of desirability, desirability and intentions (Busenitz, Gomez & Spencer, 2000; North, 1990; Thoumrungroje, 2010). Research focused on emerging market contexts is useful in understanding institutional profiles of developing markets as studies in this field have validated the instrument and theory in a developed market context.

Political, economic and cultural dimensions have influenced the emergence of SE in South Africa (Karanda & Toledano, 2012; Masendeke & Mugova, 2009). Although the developments in the social economy over the past decade are noteworthy, macroeconomic and structural factors remain a major constraint requiring reform (Masendeke & Mugova, 2009; Urban, 2008). African governments, as custodians of citizen's hopes, have failed to address economic and social challenges (Karanda & Toledano, 2012; Littlewood & Holt, 2015) and the economy is struggling to transition and transform (Masendeke & Mugova, 2009).

The economic and political challenges faced by African governments exacerbate the social problems (Karanda & Toledano, 2012); at the same time, the institutional voids create opportunities for innovative solutions that create social value (Littlewood & Holt, 2015). Urban (2015) posits that developed countries, which have higher SEA, are most likely to look out for others by virtue of their economic status, this is not the case in sub-Saharan Africa.

2.4 SE in South Africa

It is undeniable that governments in developing and emerging economies are being challenged by the multiple dynamics of social deficits; South Africa is one of them. South Africa is challenged with socio-economic and sustainable development matters and is characterised by poverty, inequality, education, HIV and AIDS, high unemployment, the apartheid legacy among other challenges (Rwigema, Urban & Venter, 2010; Urban, 2015). Bernardino et al. (2015) posit that SE is an important tool for the development of societies especially across emerging and developing economies in the world. SE has the capability to

resolve some of the most persistent problems in communities around the world (Bernardino et al., 2015; Urban, 2008).

The development of a body of knowledge that will improve understanding of organisational factors and managerial and entrepreneurial skills that foster successful SE practises that focus on mitigating poverty, is in the best interest of society (Urban, 2008). In South Africa, social enterprises are involved in the service provision in the education, basic health and security sectors (Littlewood & Holt, 2015; Urban, 2008).

The development of SE is still largely influenced by international and bilateral political and economic relations across sub-Saharan Africa (Karanda & Toledano, 2012). These researchers highlighted the narratives of SE in a developing country context, they analysed the individual characteristics as well as organisational factors and consequences in South Africa. Littlewood and Holt (2015) further explored the South African social enterprise sector in terms of context, environment and entrepreneurial process.

Rivera-Santos et al. (2014) quantitatively examine SE across sub-Saharan Africa and their findings corroborate that contextual factors are critical in understanding entrepreneurship. The research findings substantiate the need to consider the environment into SE research and calls for in-depth research to examine the relationship between SE and the environment in African countries (Rivera-Santos et al., 2014).

Governments in less developed countries are struggling to offer social services to its people and their “sole provider status” is no longer sustainable (Bernardino et al., 2015, 5; Leadbeater, 1997). The emergence of SE is a response to deficits in social service provision by the private and public sector. Viviers et al. (2012) supports this view and posits that SE has the potential to solve social challenges, such as poverty and unemployment, in South Africa.

SE is important for sustainable development of societies especially in under developed and emerging economies across the world (Viviers et al., 2012). It has the potential to solve some of the most persistent social challenges (Urban,

2015; Bernardino et al., 2015). The new democratic government in South Africa expressed commitment to transformation of the economic, social and political arenas; however, two decades later the level of inequality remains significantly high. The South African government has proposed various programs aimed at arresting the accelerating rate of youth unemployment, which includes improving education and skills development (Karanda & Toledano, 2012; Littlewood & Holt, 2015).

Although stunted, there has no doubt been transformation across public and private sectors in the economic, social and political spheres. There has been a marked interest the in the addressing the social challenges in communities over the last decade (Littlewood & Holt, 2015). This is evident in two ways; firstly growth in academic interest in SE in South Africa (Keplin, 2008), and second, growth in social enterprises engaging in the social economy (Karanda & Toledano, 2012).

There has been a notable scholarly interest in SE; mechanisms that have been deployed to address some of the most prominent problems across sub-Saharan Africa. (Kerlin, 2008; Littlewood & Holt, 2015). Despite this growing interest, little is known or has been researched in the discourse of SE (Rivera-Santos et al., 2014), thus there is a growing need for research in order to understand SE in the sub-Saharan African context. There are limited quantitative studies in the discourse of SE in Africa and this research answers a call by Littlewood and Holt (2015) for quantitative research in the sub-Saharan context.

SE has become important in addressing social challenges through innovative solutions that create social value across the world, both in developed and most importantly in developing and emerging economies. SE research in South Africa tends to be more practitioner-focused rather than scholarly, and there are many unknowns in this field (Littlewood & Holt, 2015).

2.4.1 Conceptual definitions of SE in South Africa

Although SE has recently gained attention in the discourse of academia (Defourny & Nyssens, 2008; Karanda & Toledano, 2013); there is still much debate on what it really is. Mair and Marti (2009) present SE as an activity which focuses on catalysing social change and tackles social needs, while not being motivated primarily by financial good but by the greater good of society.

Researchers and practitioners do not seem to agree on the definition of SE in South Africa and a number of definitions are operational. These definitions view social enterprises as organisational forms as well as activities for facilitating change social and environmental among the poor and disadvantaged (Littlewood and Holt, 2015). African Social Entrepreneurs Network (ASEN), a practitioner organisation, defines a social enterprise as follows:

> The organisations social entrepreneurs have established to put their innovations into practice. In its broadest sense social enterprise can refer to small community enterprises, co-operatives, NGOs using income generating strategies to become more sustainable, social businesses or companies that are driven by their desire to bring social or environmental change (ASEN, 2015).

The above definition recognises the broad as well as narrow perspective of SE and encompasses environmental change and the concept of sustainability. This definition represents the wide landscape of SE in South Africa (Littlewood & Holt, 2015). Steinman and van Rooij (2012) identify the broad and narrow distinctions in the conceptual definitions. They propose the following definition for SE: “A social enterprise’s primary objective is to ameliorate social problems through a financially sustainable business model, where surpluses (if any) are principally reinvested for that purpose” (Steinman & van Rooij, 2012:7).

The term social enterprise is used broadly in South Africa as well as across the world and ambiguity may exist as to the classification of organisational forms for SE. Steinman and van Rooij (2012) constructed the concept of Social and Solidarity Economy Organisations (SSEOS), which comprise non-profit

organisation, social enterprises as well as section 21 companies (Littlewood & Holt, 2015).

Although SE has gained attention in the discourse of researchers there is still much debate on what it really is (Karanda & Toledano, 2013). Academic definitions tend to place emphasis on the founder, processes, social enterprise or outcomes (Mair & Marti, 2006). SE is a relatively new concept, as such; no clear definitions are applied within the South African context as the field is still struggling for legitimacy (Lekhanya, 2015; Drayton, 2012). There is no formal definition in South Africa for SE organisations, which are grouped into two categories – for profit organisations and not for profit organisations – with no clear operating space within legislation for hybrid ventures (Karanda & Toledano, 2013; Lekhanya 2015).

The definition formulated by Lekhanya (2015:69), in respect of the South African context focuses on the objectives of SE, “a process that brings social change and addresses important social needs”. South Africa can benefit massively from a breed of social entrepreneurs or change agents who pursue innovative solutions to solve the country’s social problems (Viviers, Venter & Solomon, 2012).

2.4.2 SE and BEE legislation

The apartheid legacy creates a contextual difference for South Africa where redistributive justice has facilitated the compliance of business and engagement in corporate social responsibility initiatives through Black Economic Empowerment (BEE) legislation (Littlewood & Holt, 2015). The existence of social benefits is peculiar to the South African context in relation to sub-Saharan Africa (Karanda & Toledano, 2012).

Although there is evidence of the positive and measurable social benefits generated by SE, there is a high degree of scepticism by government and other stakeholders as to their aims (Urban, 2008). Littlewood and Holt (2015) highlight that the regulations that were created to benefit and empower previously

disadvantaged groups have not achieved the expected success (Gafurini & Urban, 2015). The Gini index measures the "extent to which the consumption expenditure among households or individuals within an economy deviates from a perfectly equal distribution" (World Bank, 2014:75) and South Africa scores 65, a very high score.

The BEE framework in South Africa is unique and enables practitioners to underscore the interest in SE, as this provides a solution to improve enterprise development and socio-economic development initiatives that may enhance community development (Volkmann, Tokarski & Ernst, 2012). South African legislation fosters corporate social investment, through the channelling of funds towards social development initiatives to support social enterprises (Littlewood & Holt, 2015).

2.5 Institutional theory – towards a conceptual understanding

Nobel Prize winner and economist, Douglas North, propounded that the institutional theory, defining institutions as "rules of the game, in a society or more formally; humanly devised constraints that shape human interaction", (North, 1990:5, cited in Suatet, 2005). Institutions can be divided into formal and informal (Urbano et al., 2010) and into three dimensions regulatory, normative and cognitive (North, 1990). The institutional theory puts forward the notion that, the development of organisational structures and behaviours is dependent upon the institutional pillars of regulatory, cognitive and normative dimensions (North, 1990; Rivera-Santos et al., 2014).

The institutional approach (sociological) attempts to explain how the external environmental factors determine an individuals' decision to become an entrepreneur that is, entrepreneurial intention (Busenitz et al., 2000; Manalova, Eunni & Gyochev, 2007; Shapero & Sokol, 1982). Bernardino et al. (2015) indicate that institutions have both direct and indirect effects on the resolution to become a social entrepreneur, which will vary according to the levels of social challenges, e.g. poverty and unemployment.

Busenitz et al. (2000) suggested that institutional profiles determine the level and type of entrepreneurial activity in economies. The concept of a “country institutional profile” was developed by Kostova (1997:182) and later validated and refined by Busenitz et al. (2000) through a six nation study in which the findings indicated differences among countries (Valdez & Richardson; 2013).

The framework by Ruef and Scott (1998) identifies three dimensions - regulatory, cultural cognitive and normative aspects where prior studies had focused on the economic aspect of the environment. Valdez and Richardson (2013) suggest that incorporating the broad range of the institutional framework elements will enhance understanding. The role of institutions is to provide guidance, allow for routines and reduce uncertainty of interactions (Suatet, 2005).

Table 1: Characteristics of the three pillars of institutions (Ruef & Scott, 1998)

Theory element	Regulatory	Normative	Cognitive
Basis of compliance	Expedience	Social obligation	Taken for granted
Mechanisms	Coercive	Normative	Mimetic
Logic	Instrumentality	Appropriateness	Orthodoxy
Indicators	Rules, laws, sanctions	Certification, accreditation	Prevalence, isomorphism
Basis of legitimacy	Legally sanctioned	Morally governed	Culturally supported, conceptually correct

Sine and David (2010) suggest that there are three dimensions of the institutions; they explain the first two in relation to their influence on intentions:

a) Cultural cognitive dimensions deeply imbedded ideologies are widely diffused in the social setting. Beliefs influence entrepreneurial processes, structures, and outcomes from the perspective of both the entrepreneur and consumer. Cultural cognitive legitimacy is the degree to which a

process is aligned with the ideologies ‘taken for granted’ assumptions in a social setting (Sine & David, 2010).

b) Normative environment focuses on the norms and values within the society – what is good or appropriate. Sine and David (2010) argue that norms influence the resolution to become an entrepreneur that is, who will and who will not become an entrepreneur. Normative actors play a critical role in the guiding and shaping of entrepreneurial outcomes.

The study by Valdez and Richardson (2013) confirms the relationship between institutional dimensions, normative, cognitive and regulatory, with entrepreneurial activity. Empirical evidence shows that entrepreneurial activities differ across countries, particularly between developing and developed countries, suggesting contextual differences to be a source of the differences. In line with this view, Scott (1995) suggests that institutions are significant predictors for entrepreneurial activity. Busenitz et al. (2000) further suggest that institutional profiles account for the differences in entrepreneurial activity.

2.5.1 Institutional factors in SE

Although there research has been published which focuses on identifying the contextual as well as individual antecedents of SE, little research has investigated the influence or role of the environment on SE (Griffiths et al., 2013; Viviers et al., 2012). Griffiths et al. (2013) focused their study on investigating contextual factors at a macro-level and their influence on the emergence of SE. The results of the study indicated that these factors do not affect social entrepreneur venture creation to the same extent that they influenced traditional entrepreneurship.

Consistent with Griffiths et al. (2013), Viviers et al. (2012) in their study found evidence indicating that positive perceptions of the institutional environment have little influence on the formation of social entrepreneurial ventures. The findings also indicate that self-efficacy has significant influence on the decision

to establish a social venture; justifying the emergence of SE even in environments where institutions are weak (Viviers et al., 2012).

The distinction between commercial efficiency and social efficiency is that the former is concerned with profits in the economic system or economic value, and the latter is concerned with community welfare or social value. The proponents of the institutional theory suggest that institutions are responsible for the motivation of an individual to engage in the creation of social value (North, 1990; Ruef & Scott, 1998). This theory is based on the work of Mitchell (1914, cited in Urbano et al., 2010), which argued that the way in which individuals behave and act is influenced by the institutions of the society they live in. Little is known about the influence of institutions on the emergence and implementation of SE (Urbano et al., 2010)

Empirical research suggests that entrepreneurial activities are influenced by context, and institutional environments, which develop over time, determine and shape perceptions of desirability, feasibility and intentions (Busenitz et al., 2000; North, 1990; Thoumrungroje, 2010). Consistent with this view, Arasti, Pasvishe and Motavaseli (2012) argue that institutions affect the level of entrepreneurship as well as the type of entrepreneurship that is evident in a society or country. There is great importance placed on the influence of entrepreneurial contexts on the social entrepreneurial venture. Institutional as well as structural support systems may be weak, with inadequate resources (Griffiths et al., 2013). The difference in contexts therefore results in social entrepreneurs requiring unique sets of skills and strategies to mobilise and access resources in order to create value (Griffiths et al., 2013; Urban, 2008).

).

Littlehood and Holt (2013) utilise Gartner's (1985) framework, which identifies the interactions between the environment and SE, the (social) enterprise and the entrepreneur. This approach is adopted in SE literature focusing on the three pillars of the institutional environment, i.e. normative, regulatory and cognitive. Bernadino et al. (2014) point out that institutions have both direct and

indirect effects on the establishment of SE ventures, which in turn depend on levels of social challenges, such as poverty and unemployment.

2.5.2 Regulatory institutional environment

Regulatory factors exert control over social entrepreneurial processes and outcomes (Seelos et al., 2011). Bosman, Wennekers and Amaros (2012) suggest that an improvement in the regulatory environment has positive effects on the growth as well as survival of businesses in South Africa. The regulatory environment refers to the formal rules as well as incentives, which constrain and regularise entrepreneurial behaviour (Seelos et al., 2011:335 Urban, 2013).

Estrin et al. (2013) bring forward the notion that social entrepreneurial ventures are successful in institutional contexts where there is a strong rule of law. Their research confirms the relationship and entrepreneurial benefits from independent, predictable laws and regulatory systems. In Seelos and Mair's (2005) study, they sought to investigate the influence of the regulatory environment on the formation of Sekem SEO[1] in Egypt and concluded that uncertainty in the regulatory environment delayed and hindered the development of SE.

This dimension is primarily concerned with the establishment of rewards and punishment that influence the actions of individuals (Valdez & Richardson, 2013; Ruef & Scott, 1998). The regulatory environment is an inhibitor or an enabler in the development of entrepreneurship (Herrington, Kew & Kew, 2009). Further to that, perceptions of the regulatory environment have a strong influence on the decisions to engage in entrepreneurial behaviour. This study found that a positive cognitive environment had a positive relationship with intentions to create a business, although the extent was insignificant.

The regulatory environment (formal and informal) is responsible for setting rules and establishing rewards or punishments (Ruef & Scott, 1998; Valdez &

[1] Sekem SEO is a social venture formed in 1977 in Egypt

Richardson, 2013). Consequently, governments influence the development of SEI and the emergence of SE in three main ways:

a) Conducive regulatory environment;
b) Partnerships and recognition of SE ventures; and
c) Development of a supportive broader framework for SE (Bernardino et al., 2015; Estrin, Mickiewicz & Stephan, 2013; Ferri & Urbano, 2015).

In conclusion, the government can create a supportive environment through the provision of regulatory frameworks, engagement with SE as well as fostering innovation through media and the educational system.

Findings from Valdez and Richardson (2013) suggested that when the regulatory environment supported entrepreneurship, individuals were less likely to engage in necessity entrepreneurship. Necessity entrepreneurship refers to the intention to start engage in entrepreneurship that is influenced not by an opportunity but by the lack of other choices particularly employment. When individual resort to creating their own economic activity that is not necessarily "productive" but creates a means of survival (Bosma & Levie,2009). The by Valdez and Richardson (2013) is important because there are high levels of necessity entrepreneurship in South Africa and the country needs to move towards productive entrepreneurship i.e. opportunity entrepreneurship. Countries that are interested in economic development should therefore pay attention to macro-level institutions as well as policies that encourage entrepreneurial behaviour (Valdez & Richardson, 2013).

In South Africa, various pieces of legislation are responsible for regulating the SE section, these are the Non-Profit Organisation Act (RSA, 1997), the Companies Act (RSA, 2011), which govern all entities private or public in the non-profit sector, as well as the Broad-based Black Economic Empowerment Act (RSA, 2003). The B-BBEE Act influences the landscape of SE in South Africa particularly through the engagement of corporate businesses in the upliftment of marginalised communities through the provision of funds for socio-economic development in compliance with the B-BBEE Act (Karanda & Toledano, 2013; Littlewood & Holt, 2015).

Despite challenges in implementation, the South African government is committed to addressing the social challenges embarking on skills development in a bid to arrest the spiralling youth unemployment, crime and economic exclusion (Littlewood & Holt 2015; Urban, 2015). This study therefore proposed the following hypotheses in respect of the regulatory environment and SEI and its antecedents – perceptions of feasibility and desirability;

Hypothesis 1^a Null: There is no relationship between perceptions of the regulatory environment and SEI.

Hypothesis 1^a: There is a positive relationship between perceptions of the regulatory environment and SEI.

Hypothesis 1^b Null: There is no relationship between perceptions of the regulatory environment and perceptions of feasibility.

Hypothesis 1^b: There is a positive relationship between perceptions of the regulatory environment and perceptions of feasibility.

Hypothesis 1^c Null: There is no relationship between perceptions of the regulatory environment and perceptions of desirability.

Hypothesis 1^c: There is a positive relationship between perceptions of the regulatory environment and perceptions of desirability.

2.5.3 Normative institutional environment

The normative environment as a concept measures the extent to which the residents of a country admire and perceive entrepreneurial thinking and innovative activities as important (Ferri & Urbano, 2015; Urban, 2013). Seelos et al. (2011:359) define the normative environment as “sets of prescriptions that shape boundaries for appropriate action”. Scott (2001:54) in support of this view defined normative influences as, “prescriptive evaluative and obligatory dimensions of social life”.

Normative mechanisms arise from the social structures and are responsible for shaping the perceived appropriate, as well as expected, entrepreneurial behaviour (Seelos et al., 2011; Urban 2013). Seelos et al. (2011) posit that norms shape the standards of appropriateness for entrepreneurial innovation and it is inferred that the same influences exist for SE. Social obligations and expectations about the appropriateness of actions in a given culture shape the entrepreneurial intentions as well as processes and outcomes.

The normative pillar is concerned with societal values (i.e. 'what is attractive?') and social norms, which reflect the generally acceptable behaviour to which individuals abide or adhere to in society (Valdez & Richardson, 2013). The norms provide stability within society (March & Olsen, 1989) Individuals within a society tend to adhere and uphold societal norms, thereby acting in a socially attractive and acceptable way (March & Olsen, 1989; Valdez & Richardson, 2013). This element is defined as "collective sense making" by Welter and Smallbone (2009:59).

Arasti et al. (2012) posit the view that the level of admiration or attraction the society (country) has regarding entrepreneurship and entrepreneurial activity is what is termed the normative environment. Littlewood and Holt (2015) argue that the normative and cognitive environment in South Africa are heavily informed by legacy and sustainable developmental challenges, which individuals and organisations are attempting to address through creating social value.

South Africa's economy is emerging, although rated Africa's top emerging market (World Bank, 2014) it is fraught with immature institutions (Littlewood & Holt, 2015), which influences the inherent attributes of social challenges, perceptions and opportunities in the field of SE (Urban, 2008). An improvement of the future narrative of SE in is only possible if the normative and cognitive change is reproduced in people's minds (Karanda & Toledano, 2012).

This study therefore proposes the following hypotheses in respect of the normative environment, SEI and its antecedents – perceptions of feasibility and desirability:

Hypothesis 2^{a} Null: There is no relationship between perceptions of the normative environment and SEI.

Hypothesis 2^{a}: There is a positive relationship between perceptions of the normative environment and SEI.

Hypothesis 2^{b} Null: There is no relationship between perceptions of the normative environment and perceptions of feasibility.

Hypothesis 2^{b}: There is a positive relationship between perceptions of the normative environment and perceptions of feasibility.

Hypothesis 2^{c} Null: There is no relationship between perceptions of the normative environment and perceptions of desirability.

Hypothesis 2^{c}: There is a positive relationship between perceptions of the normative environment and perceptions of desirability.

2.5.4 Cognitive institutional environment

According to Seelos et al. (2011), the institutional environment creates mechanisms that shape the context of social entrepreneurial ventures through creating norms of conduct and meaningful systems. Cognitive institutional factors refer to the templates and scripts shared among a community or nation (Seelos et al., 2011).

The cognitive environment dimension takes into account the understanding that informs the social reality in a given society at differing levels, national, organisational and individual, which in turn influences people's perceptions (Valdez & Richardson, 2013). Entrepreneurial cognitions inform the understanding of the behaviour of entrepreneurs; it premises that behaviour emerges because of cognitions (Karanda & Toledano, 2012).

Consequently, standards of behaviour vary across cultures and contexts and are learnt through social interactions (Karanda & Toledano, 2012; Valdez & Richardson, 2013). The cognitive view is built upon the empirical evidence of the traits approach by McClelland (1961), which places emphasis on the need for achievement to explain entrepreneurial differences. The trait approach fails to explain fully the differences among business leaders, leading critics to question the usefulness and appropriateness of the theory (Mitchell, Busenitz, Lant, McDougall, Morse & Smith, 2002; Valdez & Richardson, 2013). A counter argument for the trait approach highlights that, if the trait approach were used, policy makers need not waste their efforts in economic development by targeting the 'correct type of individual' for better returns on investment as this approach is not feasible (Gartner, 1985; Valdez & Richardson, 2013).

A notable finding by Mitchell et al. (2002) suggests a strong link between national culture and cognitive differences, which influences entrepreneurial activity. Cognitive dimension identifies "individual understanding of meta belief, influenced by experience and background" (Welter & Smallbone, 2009:59). Empirical research suggests that cognitive structures create systems upon which shared meanings and expectations are formed. Urban (2013) argues that the cognitive approach places emphasis on the relationship between entrepreneurial behaviours and cognitions. South Africa's cognitive environment is characterised by a lack of skills, business knowledge and necessary resources (Littlewood & Holt, 2015; Urban, 2013).

This study proposes the following hypotheses in respect of the cognitive environment, SEI and its antecedents – perceptions of feasibility and desirability:

> *Hypothesis 3^{a} Null: There is no relationship between perceptions of the cognitive environment and SEI.*
>
> *Hypothesis 3^{a}: There is a positive relationship between perceptions of the cognitive environment and SEI.*

Hypothesis 3^{b} Null: There is no relationship between perceptions of the cognitive environment and perceptions of feasibility.

Hypothesis 3^{b}: There is a positive relationship between perceptions of the cognitive environment and perceptions of feasibility.

Hypothesis 3^{c} Null: There is no relationship between perceptions of the cognitive environment and perceptions of desirability.

Hypothesis 3^{c}: There is a positive relationship between perceptions of the cognitive environment and perceptions of desirability.

.

2.5.6 Institutional voids and SE

Mair and Marti (2009; 421) define institutional voids as the absence/weakness of "institutional arrangements, which prevent those excluded by poverty from participating in market activities". This definition brings into light the challenges that are attributable to weak institutions, which are prevalent across developing economies. Several studies have indicated that developing and emerging economies are characterised by relatively "immature institutional fabric" which shape social and economic realities (Mair & Marti, 2009:420).

Although there is insurmountable evidence confirming the failure of governments across sub-Saharan Africa to develop and strengthen institutions, this creates opportunities for social entrepreneurs to create, transform and reconfigure institutions (Mair & Marti, 2009). Social entrepreneurs can play a critical role of creating sustainable social value where governments have failed and commercial entrepreneurship focuses on economic value (Mair & Marti, 2009; Stephan, Uhlaner & Stride, 2015).

The theory of institutional voids reflects on the incapacity within institutions that have been credited for the emergence of SE (Bernardino et al., 2015; Urban, 2015). This view suggests that SE initiatives are a response to the inability of

institutional systems to cater for the much needed social goods and services. Similarly, Estrin et al. (2013) highlight that SE is more important in economies where public expenses are limited and there is little provision of social services, if any. The South African institutional environment is fraught with serious institutional gaps (Littlewood & Holt, 2015).

A study by Stephan et al. (2015) confirmed that there are joint effects of SE on regulatory, cognitive and normative institutions. The absence of supportive institutions is argued to contribute to the challenges, which in turn hinder the participation in entrepreneurial activities in developing countries. South Africa's institutional infrastructure is immature although relatively stronger than countries in sub-Saharan Africa; this influences the nature of socio-economic challenges in the country (Littlewood & Holt, 2015). However, Mair and Marti (2009) suggest that institutional voids present an opportunity in which social entrepreneurs thrive by bridging the voids. In conclusion, although governments have put in place institutions, these may be inadequate to support sustainable social development; SE results from the efforts of motivated entrepreneurs addressing such voids.

2.6 Social entrepreneurial intentions (SEIs)

There are differing views in literature concerning the meaning of intentions – one school of thought suggests that it refers to the likelihood of starting a business, where the other supposes that, it is the intent to start a business (Krueger, 1993). Intentions literature argues persuasively that, entrepreneurial intent is the probability of starting an entrepreneurial venture (Weerakoon & Gunatissa, 2014). Intention refers to the degree that an individual is committed to undertaking a particular behaviour/activity, in this instance SE (Krueger, 1993). Intentions are indicators of the extent to which an individual is willing to try or exert effort towards performing certain behaviour (Urban & Teise, 2015).

Intentions are described as the propensity to perform a particular behaviour (Krueger, 1993) and it precedes behaviour. Bird (1988) resonates with this view and suggests that intentions are influences by attitudes, and intentions in turn

predict behaviour (Kim & Hunter, 1993). In addition to this, Krueger (1993) concludes that entrepreneurial intentions are responsible for the commitment and resolution that an individual undertakes in the entrepreneurial process.

According to Krueger (1993), the commitment to start a new business is what is termed entrepreneurial intent. Intentions are viewed as antecedents to behaviour; empirical evidence on the influence of intentions on behaviour has yielded better explanations to entrepreneurial behaviour than individual or situational variables (Urban, Van Vuuren & Owen, 2008). Intentions are critical to the decision to engage in entrepreneurship (Linan & Chen, 2009). The intentions approach is cognitive based, various factors influence entrepreneurial intentions and behaviour, (Bird, 1988), cognitive variables are named "motivational antecedents", (Ajzen, 1991:210). Situational factors such as time constraints, social pressure also influence attitude towards entrepreneurship (Ajzen, 1991; Linan & Chen, 2009).

Academia in this discourse has developed interest in the determinants of entrepreneurial intent – What influences the decision to become an entrepreneur?(Urban et al., 2008). Understanding the formation and factors influencing SEI is essential in equipping learners with the skills necessary to eradicate social problems and encourage sustainable development (Weerakoon & Gunatissa, 2014). Although there is no consensus on the determinants of intention, literature classifies the determinants as situational or individual.

Krueger (1993) posits that intentions are the single best predictor of any planned behaviour for both entrepreneurship and SE. Mair and Noboa (2003) establish that the relationship between entrepreneurial intentions and entrepreneurial behaviour is significantly positive. Kim and Hunter (1993) further suggest that intentions predict behaviour but also that attitudes predict intentions. These findings support the theory propounded by Bird (1988), suggesting that behaviour depends upon will, later termed intent, which influences entrepreneurial activity. Consistent with these views, Urban and Teise (2015) conclude that intentions are indicators of the extent to which an

individual is willing to try or exert effort towards the achievement of certain behaviour – in this case SE.

Academic researchers have studied entrepreneurial intention formation building upon Shapero and Sokol's (1982) research. Their model of EI formation has been useful and critical in understanding the antecedents of entrepreneurial intentions. According to Krueger (1993), the formation of new ventures is highly dependent upon the intentions (Mair & Noboa, 2003). Ajzen (1991), a psychologist, argued that intentions explain human behaviour in particular situations with a high level of accuracy (Mair & Noboa, 2003).

Bird (1988), in the model for intentionality, puts forward the view that historical factors of individuals predisposes them to entrepreneurial intentions. Further research has shown that personal factors influence perceived desirability and perceived feasibility instead (Mair & Noboa, 2003). The following models if SEI were considered in this research:

a) Theory of planned behaviour (TPB) by Ajzen (1991);
b) Theory of social entrepreneurial event (SEE) by Shapero and Sokol (1982); and
c) Entrepreneurial potential model (EPM) by Krueger and Brazeal (1994).

2.6.1 Theory of planned behaviour (TPB)

This theory was propounded by Ajzen in 1991, three antecedents to entrepreneurial intention are identified in the model – attitudes, social norms and perceived behavioural control (Ajzen, 1991). Attitudes refer to the extent to which an individual perceives the behaviour (formation of social entrepreneurial venture) to be favourable or unfavourable (Stephan et al., 2009). Attitudes can be classified into affective and evaluative (Linan & Chen; 2009).

Several studies have been conducted to investigate the influence of entrepreneurial antecedents using the TPB in emerging economies, for example Russia, South Africa, Poland and China (S. Wu & L. Wu, 2008), as well as cross-national studies by Linan and Chen (2009). Iakovleva, Kolvereid and

Stephan (2011) employed the TPB among students in five developing and nine developed countries and investigated whether the antecedents of EI differ among countries. The results support empirical evidence by suggesting that the TPB can be replicated across developing and developed countries. This key finding indicates that the theory is reliable and applicable for different contexts.

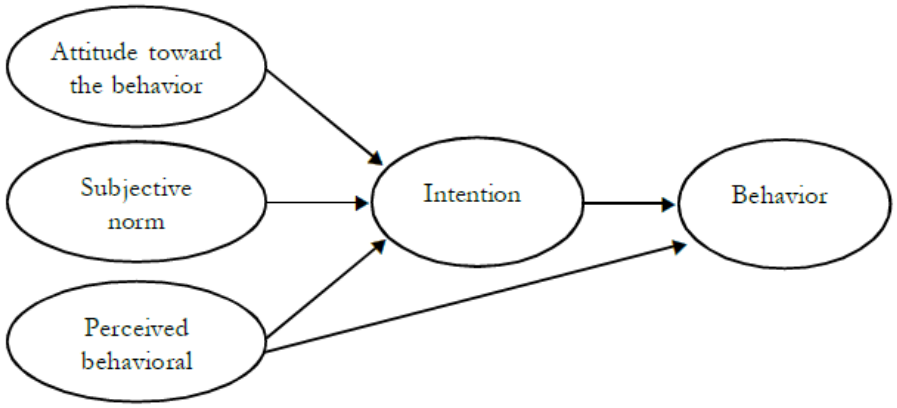


Figure 1: Theory of planned behaviour (TPB) (Ajzen, 1991:182)

In support of this, Sivarajah and Achchuthan (2013) suggest that the TPB is applicable to research on entrepreneurial intention. This conclusion is backed by Ariff et al. (2010) who conducted research aimed at investigating the applicability of the TPB, testing the concepts of attitudes, subjective norms and perceived behavioural controls on Malay students.

Sivarajah and Achchuthan (2013) conceptualised a model in which the antecedents to entrepreneurial intentions are: desirability, feasibility, risk tolerance, and perceptions of support. These factors determine the motivation to become an entrepreneur, which results in the formation EIs. Demographic factors such as prior experience, family business experience, gender etc. were found to have significant moderating effects, which is consistent with research in entrepreneurial intentions.

In their study, Iakovleva, Kolvereid and Stephan (2011) employed the TPB among students in the five developing and nine developed countries in order to investigate whether antecedents of entrepreneurial intentions differ among

countries and economies. Results of this study show that the TPB can be replicated in both developing and developed countries. These findings are consistent with empirical evidence as shown by several other studies.

TPB can be replicated and is fully predictive in developing economies. The key finding is the reliability and consistency of the theory in explaining EI across different contexts (Iakovleva, Kolvereid & Stephan, 2011).

2.6.2 Theory of social entrepreneurial event (SEE)

Mair and Noboa (2003) formulated a model in which various factors influence what an individual perceives as feasible and desirable, which also varies among individuals. This view is consistent with Shapero and Sokol (1982) who argue that the socio-cultural environment determines the variations in individual behaviour. Shapero and Sokol's (1982) theory suggests that intentions are influenced by perceptions of feasibility, desirability and propensity to act (Weerakoon & Gunatissa, 2014).

Unlike the TPB, Shapero and Sokol's (1982) theory of SEE is not well tested (Urban, 2008). The conceptual argument in favour of entrepreneurial self-efficacy proposed that self-efficacy is influenced by the information sources and their degree of persuasiveness is depends on personal cultural values. People are argued to achieve the greatest personal efficacy when their environmental support system is aligned with their psychological orientation (Urban, 2008).

In conclusion, the theory of SEE suggests that the resolution to become an entrepreneur (social) is influenced by the perceptions of desirability and feasibility (Linan et al., 2005). Consistent with empirical evidence, Urban et al. (2008) indicate that entrepreneurs are motivated based on two conditions; they must perceive themselves as both capable and psychologically equipped to function. Both these perceptions are influenced by cultural and social factors, which suggest that exogenous factors indirectly influence intentions; instead, they influence the conscious or unconscious analysis of feasibility and

desirability of entrepreneurial behaviour (Linan et al., 2005, Shapero & Sokol, 1982).

2.6.3 Entrepreneurial potential model (EPM)

The EPM is an attempt to integrate Ajzen's (1991) TPB with Shapero and Sokol's (1982) SEE model (Ayob et al., 2013). This model supposes that entrepreneurial intention is influenced by attitudes based on perception derived from the environment. Urbano et al. (2010) and Dissanayake (2013) suggest the EPM is a robust model for measuring EI. Figure 2 shows this model;

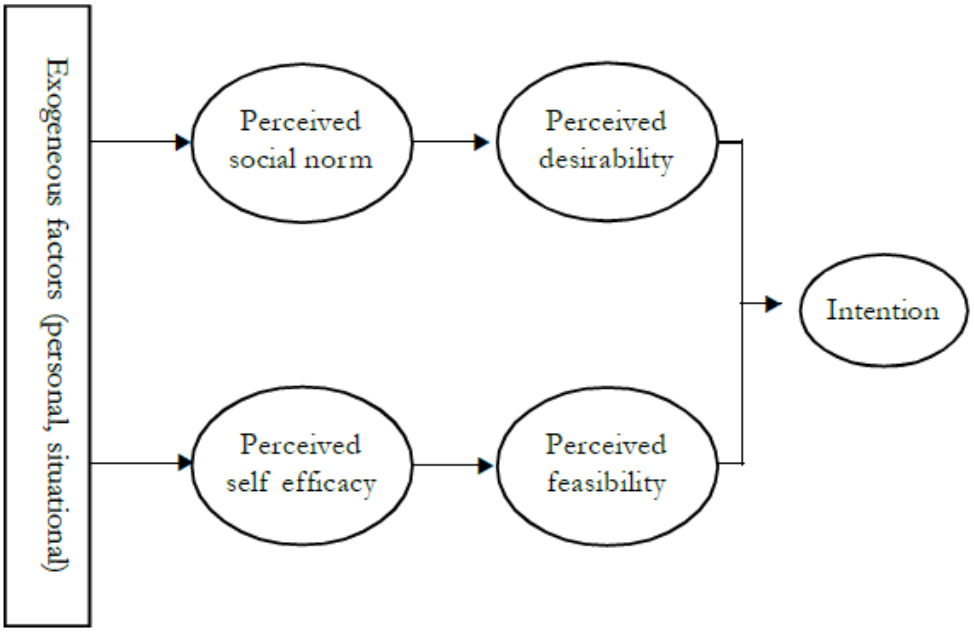


Figure 2: Entrepreneurial potential model (EPM) (Carsrud & Brännback, 2009:44)

2.7 Antecedents of entrepreneurial intentions

According to Krueger (1993), situational factors are insignificantly related to intentions; consistent with this notion, this study included measures of feasibility and desirability as antecedents to intention in order to draw meaningful relationships. The core antecedents of EIs are perceptions of desirability and

feasibility of entrepreneurial action (Mair & Noboa 2003). The institutional environment influences the perceptions of desirability and feasibility of entrepreneurship as the antecedents of intent. Krueger and Brazeal (1994) attempted to integrate Shapero's (1982) model and Ajzen's (1991) model; both suggest that propensity to act, perceived desirability and desired credibility accounted for half the variance of the model, while perceptions of feasibility explained the rest (Krueger & Brazeal, 1994; Urban et al., 2008).

Entrepreneurs are motivated to act based on the condition that they perceive themselves as capable and psychologically equipped to function (Urban et al., 2008). Krueger and Brazeal (1994) attempted to integrate Shapero and Sokol's (1982) model and Ajzen's (1991) model and suggested that the propensity to act, perceived desirability and perceived credibility accounted for half of the models' variance, while perceptions of feasibility explained the rest (Urban et al., 2008).

2.7.1 Perceived desirability as an antecedent

Perceived desirability is defined in terms of the attractiveness of creating a business (Shapero & Sokol, 1982); it is the individuals' assessment of their personal desirability to perform a particular behaviour (Weerakoon & Gunatissa, 2014). In support of this view, Krueger (1993:8) suggests that, perceived desirability refers to "the degree to which one finds the prospect of starting a business to be attractive".

A key finding of the research by Ayob et al. (2013) is the mediating effects of perceived desirability in the feasibility – intention relationship. This study proposed the following hypotheses in respect of perceived feasibility and SEI:

> *Hypothesis 4 null: There is no relationship between perceptions of desirability and SEI.*
>
> *Hypothesis 4: There is a positive relationship between perceptions of desirability and SEI.*

2.7.2 Perceived feasibility as an antecedent of SEIs

An individuals' perception of their ability to undertake a particular behaviour, successfully (Boyd & Vozikis, 1994; Weerakoon & Gunatissa, 2014)is regarded as perceived feasibility. Literature suggests that this concept is identical to self-efficacy; Mair and Noboa (2003) define perceived feasibility as the degree with which individuals believe in their own ability to create a social venture. Krueger (1993) argues that perceived feasibility is related to self-efficacy, which is the belief that individuals are in possession of the skills required to achieve a desired end.

Mair and Noboa's (2003) model suggests that various factors influence what an individual perceives as feasible and desirable, which also varies among individuals. This view is consistent with Shapero and Sokol (1982) who argue that socio-cultural arena determines the variations in individual behaviour. Krueger (1993) suggests that the relationship between perceived feasibility, perceived desirability and SEI may not be linear, contrary to entrepreneurial intent models' assumptions about the relationships. This view has implications on the development of entrepreneurial intent and SEI in consideration of the association among the constructs.

This study proposed the following hypotheses in respect of perceived feasibility and SEI;

> *Hypothesis 5 null: There is no relationship between perceptions of feasibility and SEI*
>
> *Hypothesis 5: There is a positive relationship between perceptions of feasibility and SEI*

2.8 Demographic factors in SE

Kolvereid (1996) propounded the view that demographics influence intention indirectly through antecedents of SEI – attitudes, social norms, self-efficacy, perceptions of feasibility and desirability. In their study, Malebana and

Swanepoel (2015) explored the influence of gender on the formation of SEI in rural South Africa. Urban (2008) found that race and gender did not have an effect on SEI among university students in South Africa.

Several studies have used these demographic factors as control variables, including the GEM report. Linan & Chen (2009) utilise age, gender and work experience in developing and testing the reliability of the EI questionnaire. Ayob et al. (2013) included control variables such as gender, age, program enrolled for, and type of university in order to investigate whether these had any influence on the level of SEI in the students. Thrikawala (2011) revealed that the following demographic factors influence entrepreneurial intent: gender, exposure, study program, and year of study.

2.8.1 Gender

Empirical studies reveal that males are more likely to engage in entrepreneurship compared to females (Diaz-Casero, Ferreira, Mogollon & Raposo, 2009; Scherer, Adams, Carley & Wiebe, 1989). Herrington et al. (2009:102) suggests that males are more inclined to undertake entrepreneurial ventures, contrary to the findings of the GEM reports for SE in South Africa where the ratio of women to men was 1.5:1. However, Urban (2008) found no statistical difference among genders engaging in SE in South Africa.

2.8.2 Family background

There is evidence to suggest that family background positively influences the desires to start own business. Entrepreneurial parents are viewed as the perfect role models, hence the likelihood for their offspring to opt for an entrepreneurial career path. The likelihood of engaging in entrepreneurship is higher when there is a history of entrepreneurship in the family (Kunday & Çakir, 2014).

2.8.3 Age

Generation Y is believed to be more likely to pursue and establish SE ventures (Herrington et al., 2009:13). The GEM report for SE found that the average age group engaging in SE was between 25 and 34 years of age, across the 29 countries measured, with the 18 to 24 year age group being least likely to engage in SE (Terjesen et al., 2012).

2.8.4 Education

Herrington et al. (2009; 101) suggests that the relationship between an individuals' level of education and the resolution to engage in SE is positive. Consistently, Terjersen et al. (2012) found that individuals who had completed post-secondary and graduate education were most likely to engage in SE. It can thus be concluded that an educational system in SE has potential to impart skills and knowledge as well as raise awareness and build a SE culture.

Lekhanya (2015) conducted a study to investigate the relevance, role and extent to which tertiary institutions influence SE in South Africa, particularly in Kwazulu-Natal province. Tertiary institutions have the ability to influence SE positively through building sustainable social institutions. Nevertheless, the findings by Lekhanya (2015) highlighted the following;

a) A lack of willingness to participate due to a lack of understanding as to what SE entails; and
b) Lack of funding for SE research at tertiary institutions.

Lekanya (2015) concluded that the lack of financial support hinders the promotion of SE in South Africa, particularly by tertiary institutions.

Urbano et al. (2010) affirm the view that university students have the most potential to become entrepreneurs as higher education provides the opportunity to prepare would-be entrepreneurs. Dissanayake (2013) suggests that entrepreneurship is a remedy for unemployment in emerging economies and

the research findings indicate decreasing patterns of unemployment corresponding with an increase in entrepreneurial activity.

2.8.5 Prior exposure

Prior experience facilitates the development of self-belief and the perception of desirability, and assists in the creation of a support network. Background and context are critical determinants of EI and behaviour among individuals (Bird, 1988). This school of thought suggests that exposure to social entrepreneurial ventures as well as background influences perceptions of feasibility and desirability, which in turn influence the decision to become a social entrepreneur (Mair & Noboa, 2003).

Krueger (1993) found that the relationship between perceived feasibility and prior exposure to entrepreneurship was significantly positive, whereas perceived desirability was positively related to prior experience. Krueger (1993) concluded that prior entrepreneurial exposure has an indirect relationship with entrepreneurial intent through perceived feasibility and desirability and attitudes towards entrepreneurship.

2.9 The nexus of research in entrepreneurial intentions and institutional theory

Shane (2004) argues that there is the need for more research in order to gain to understand the institutional environment and entrepreneurial intent nexus. The rationale is that, institutional frameworks are responsible for defining, creating and limiting opportunities, aspirations and intentions. Institutional factors directly influence entrepreneurial intentions and activities (Arasti et al., 2012). Positive perceptions regarding the contextual environmental factors are linked to positive perceptions towards entrepreneurship (social), both directly and indirectly and at times this influence may be negative (Karimi et al., 2015). Karimi et al. (2015) concludes that positive perceptions of the institutional environment can trigger SEI through a direct influence on perceptions of desirability and feasibility.

Entrepreneurial activity differs across countries, developed and developing, suggesting that contextual factors are a source of difference (Valdez & Richardson, 2013). Ruef and Scott (1998) suggest that institutions are significant predictors of entrepreneurial activities. Busenitz et al. (2000) supports this view by suggesting that institutional profiles influence entrepreneurial activity. The study by Valdez and Richardson (2013) was aimed at enhancing knowledge pertaining to the influence of the institutional environment on the decision to become an entrepreneur (social).

The institutional approach (sociological) has been used to attempt to explain how the external environmental factors determine an individuals' decision to become an entrepreneur; that is, entrepreneurial intention (Busenitz et al., 2000; Manolova et al., 2007; Shapero & Sokol, 1982). Vidal-Suñé and López-Panisello (2013), in their study of the Spanish Autonomous Regions, observed a significant relationship between self-efficacy and perceptions of opportunities, which in turn influenced entrepreneurial intentions.

Zahra (2008) draw a relationship between social opportunities and institutional factors. The contextual factors in sub-Saharan Africa present unique social needs and inherent opportunities (Rivera-Santos et al., 2015). In their paper, the authors argue that there is an important relationship between SE and their context/environment. The institutional approach is useful in understanding the complexity of this phenomenon (Ferri & Urbano, 2015). The decision to become a social entrepreneur is conditioned by institutional frameworks, which vary across contexts (Bernardino et al., 2015; Urbano et al., 2010).

Bernardino et al. (2015) conclude that a favourable institutional environment does not necessarily result in higher SEI, instead the influence on the decision to become an entrepreneur (social) is low. These findings explain the existence and the emergence of SE even in countries where institutions are weak (Bernardino et al., 2015). Entrepreneurs will respond to social challenges and make decisions based on their skills and capabilities to engage in SE. Table 2 presents a summary of research in this field that informs this study.

Table 2: Summary of SEI and institutional environment research

Author	Research focus	Key Findings
Urbano et al. (2010)	Institutional environmental factors among social entrepreneurs in Spain	(i) Both informal and formal institutions are responsible for the emergence and implementation of SE (ii) Informal institutions - social values, social attitude, and networks - have a greater influence on the emergence as well as the implementation (iii) The formal institutions comprised of support mechanisms and this influences the implementation of SE
Diaz-Casero et al. (2012)	The aim of this study was to assess the influence of the institutional environment on the entrepreneurial intention of students in two countries	(i) The perception of feasibility is not conditioned by gender (ii) Gender does not influence perceptions of desirability (iii) Gender does not influence perceptions of intention to start (iv) Family background does not influence perceptions of feasibility of creating one owns' business (v) Having a family member who was an entrepreneur influenced perceptions of intention
Ayob et al. (2013)	Perceived feasibility , perceived desirability and SEI among business students in Malaysia exposed to SE	(i) Student exposure ---→ Perceived desirability ---→ SEIs (ii) Empathy was found to be a significant determinant of perceived feasibility so set up social entrepreneurial projects
Malebana (2015)	Gender differences in SEI among commerce students in rural South Africa	(i) Male students were found to exhibit higher levels of entrepreneurial intentions, with a higher level of self-efficacy as well as positive attitudes towards entrepreneurship (ii) Gender was found to have significant relationship with entrepreneurial intentions and its antecedents (iii) These results suggested that entrepreneurship as a male dominated field
Urban and Teise (2015)	Antecedents to SEI is South Africa	(i) Self-efficacy is a significant antecedent to SEI (ii) Achievement is a significant predictor of SEI
Shaw and Urban (2011)	Institutional environment (regulatory, normative and cognitive) in South Africa among business students exposed to entrepreneurship	(i) The regulatory environment was positively but insignificantly related to entrepreneurial intent (ii) The normative environment was positively but insignificantly related to entrepreneurial intent (iii) The cognitive environment was negatively but insignificantly related to entrepreneurial intent

Empirical evidence suggests that the decision to become a social entrepreneur is triggered by both external and internal variables. In support of this, the institutional framework approach argues that institutional pillars influence the perceptions of feasibility and desirability consequently the formation of entrepreneurial intentions (Linan, Santos & Fernandes, 2011). Scholarly evidence indicates that intentions are based on the desire to solve challenges, which is substantiated by personal capacity and skills (Urban, 2015; Urban & Teise, 2015).

Thoumrungroje (2010) concluded that there were mixed research findings regarding the influence of the institutional environment on economic activity citing there was a lack of research validating the instrument as well as assessing the impact of the institutional profiles on entrepreneurial activity. In conclusion, it is expected that perceptions of the institutional environment are associated with perceived desirability, perceived feasibility and SEI. A model of the hypothesised relationships for this study is illustrated in Figure 3.

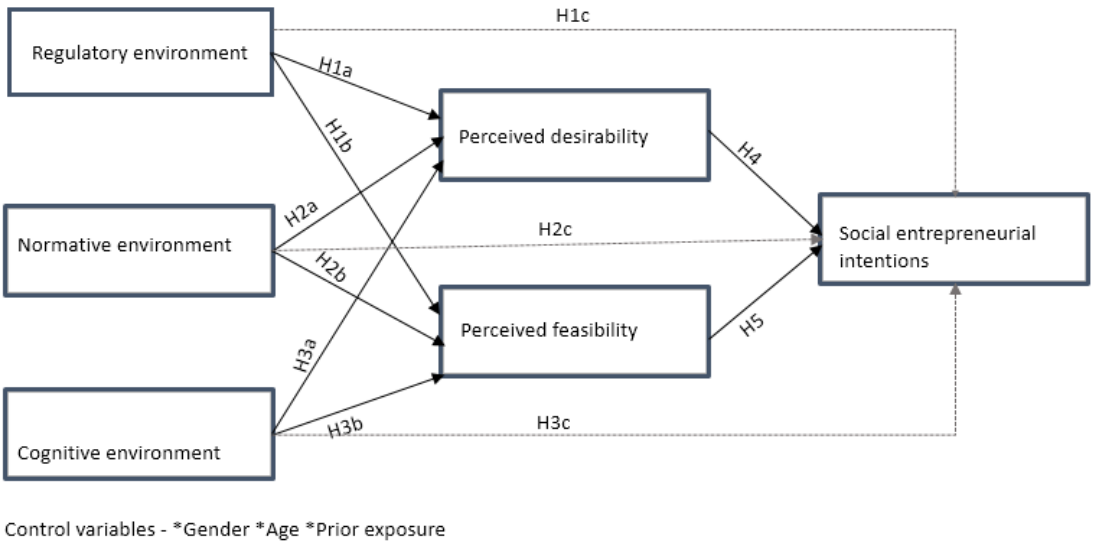


Figure 3: Research model

2.10 Conclusion

There is a need to understand the relationship and constructs of the context environment and the formation of entrepreneurial intentions and its antecedents in order to comprehend the landscape of SE in South Africa and developing nations across Africa. There is limited data in this academic field and most literature available is from Western contexts. SE in South Africa although met with scepticism as to the aims, has benefitted communities through social innovation in health care, education and other sectors.

The findings by Viviers et al. (2012) show that there is a large number of South African students who would be interested in establishing SE ventures, however only 10 percent of students indicated specific social missions that they relate to. This research finding raises the question in the minds of critics of whether intentions translate to behaviour. Critics of the intentions-based models argue that a positive outlook may not necessarily be consistent with action or in this case behaviour (Viviers et al., 2012; Ferri & Urbano, 2015).

Empirical research supports that the relationship between the perceptions of the contextual environment and entrepreneurial behaviour is significantly positive (Karimi et al., 2015). In light of the low TEA and SEA rates in South Africa (Turton & Herrington, 2013), the literature review revealed the direction of entrepreneurial intentions research in the context of emerging economies. Chapter 3 discusses the methodology followed in this study to gather data and test the hypothesis developed, to meet the objectives of this study.

CHAPTER 3: RESEARCH METHODOLOGY

This chapter is primarily concerned with providing a discussion of the methodology used to address the research question. The processes outlined in this chapter could aid in facilitating replication of this study in the future. This chapter flows in the following manner, an explanation of the population of the study, sampling techniques utilised, then an examination of the data collection. Subsequently, data analysis methods are explained, followed by the validity, reliability and limitations of the study.

3.1 Paradigmatic location of the research

This research followed a positivism approach; this methodology requires an adaptation of theoretical frameworks in order to understand reality in support of previous work (Krauss, 2005). Krauss (2005) further suggests that, positivism is viewed as a rejection of metaphysics on the rationale that knowledge is useful for describing how things are experienced.

This research adopted a deductive descriptive approach which sought to answer the questions of “what, who, why and where” (Cooper & Schindler, 2014:20).The descriptive approach defines the subject by creating a profile of the subject, they further postulate descriptive studies are significant for drawing “meaningful inferences” (Cooper & Schindler, 2014:27).

3.2 Research design

According to Ketchen and Bergh (2009:148), “research design is the science and art of planning procedures for conducting studies so as to get the most valid findings”. The authors further argue that research design is founded on the research question, which in turn guides the selection of the research direction and process.

This study was quantitative in nature, as it aimed to understand an aspect of social life (Paton & Cochran, 2002). Cooper and Schindler (2014) argue that

this approach seeks to make precise measurements of a phenomenon, by describing, explaining and predicting. In this study, questionnaires were administered and data collected and analysed through various statistical methods in order to test the hypotheses and make inferences by addressing the research question (Cooper & Schindler, 2014; Stangor, 2011).

A quantitative approach allows for generalisation of results across a wider population, which is critical for reliability and replication of studies (Tustin, Ligthelm, Martins & Van Wyk, 2005). This research was therefore a deductive quantitative approach of a cross-sectional nature in order to meet the aims of the study.

Researchers in this field have focused on using quantitative research methods to establish legitimacy and affirm the discipline of SE as an explicit domain of inquiry (Dacin et al., 2011; Gafurini & Urban, 2015, Manolova et al., 2007). The methodological approach applied in this research was consistent with previous studies on the institutional environment (Diaz-Casero et al., 2012; Urban 2013, Valdez & Richardson, 2013), perceived feasibility, perceived desirability and SEI (Ayob et al., 2013; Linan & Chen, 2009; Malebana & Swanepoel, 2015).

Following the logic, this study was cross sectional, descriptive and quantitative, which addressed the following concepts in its methodology:

a) *Who was to be assessed?* Tertiary level students in Gauteng, South Africa;

b) *What was being assessed?* The institutional environment in relation to the formation of SEIs; and

c) *How were they assessed?* Through the institutional profiling questionnaire, combined with an entrepreneurial antecedents and entrepreneurial intent questionnaire (Cooper & Schindler. 2014; Paton & Cochran, 2002; Stangor, 2011).

3.3 Population and sample

3.3.1 Population

The population in a research is the total number of subjects or elements on which the researcher intends to make inferences (Cooper & Schindler, 2014). According to Stangor (2011), it is important to define the population for a study. The population for this study was tertiary level students across different faculties enrolled at identified higher and tertiary education institutions (universities) in Gauteng, South Africa.

3.3.2 Sample and methods

It is costly and often times impossible to observe or collect data from all objects in the population in social research (Babbie & Mouton, 2009), the logic of sampling is to allow researchers to select a sizeable representative subset of the population to observe and make inferences across the wider population (Cooper & Schindler, 2014).

Once the population of the study has been identified, Cooper and Schindler (2014) suggest that a sampling frame should be defined. The sampling frame makes it possible to increase the probability of getting accurate data. In order to select the most suitable sampling technique, a review of sampling techniques employed in previous studies on the institutional theory and SEI was carried out.

Table 3 illustrates sampling techniques that have been utilised by prior studies in EI research as well as the institutional environment.

Table 3: Sampling techniques in prior studies

Author	Research focus	Methodology and sampling technique	Sample size
Urbano et al. (2010)	Institutional environmental factors among social entrepreneurs in Spain	Inductive approach Qualitative study Multiple case study approach Convenience sampling	7 cases were used
Diaz-Casero et al. (2012)	The influence of institutional environment on intention (comparative study of two countries' university students)	Quantitative approach Purposive sampling – university students from all faculties in their last two years of college	527 surveys (Beira) 516 surveys (Extremedura)
Ayob et al. (2013)	Perceived feasibility , perceived desirability and SEI among business students in Malaysia exposed to SE	Quantitative approach quota sampling	400 surveys distributed 250 were completed and usable
Malebana and Swanepoel (2015)	Gender differences in SEI among commerce students in rural South Africa	Quantitative Quota sampling	355 students participated in the study
Urban and Teise (2015)	Antecedents to SEI is South Africa	Quantitative approach Non probability convenience sampling method	264 surveys were distributed 164 surveys were completed
Urban (2015)	Institutional environment (regulatory, normative and cognitive) in South Africa among business students exposed to entrepreneurship	Quantitative approach Non probability sampling Purposive sampling – business students undertaking entrepreneurship courses	450 surveys distributed 165 were complete and usable

Consistent with the studies outlined this study utilised the non-probability purposive sampling methodology to select the sample for this research. Babbie and Mouton (2009:166) argue that purposive sampling is appropriate when the researcher selects a sample based on their own "knowledge of the population, its elements and nature". This methodology is criticised for its limitation in terms of reliability and generalisability, this is attributed to the sampling frame's inability to represent the population (Babbie & Mouton, 2009; Cooper & Schindler, 2014).

3.3.3 Sampling frame

Table 4: Research techniques

	Description
Population	University students from University of Johannesburg, University of Witwatersrand and Maharishi Institute
Sample	Students in their last year of study across all faculties
Geographic area	Johannesburg
Sample design	Purposive sampling
Collection of information	Electronic surveys

Table 5 Sampling frame

Institution	**Sample number**
University of Johannesburg	100
University of Witwatersrand	100
Maharishi Institute of Management	100

3.4 The research instrument

Busenitz et al. (2000) designed a tool to measure the institutional dimension of the environment; this scale was further developed and used by Manolova et al. (2007). Urban (2013) utilised the tool to measure the context of emerging economies; South Africa is classified as an emerging economy, based on this logic this measurement tool was deemed an appropriate.

The antecedents and SEI concepts in the model were derived from the scale by Ayob et al. (2013), Linan and Chen (2009), Mair and Noboa (2003), and Malebana and Swanepoel (2015). The concepts and scales are discussed in brief in the sections that follow.

3.4.1 Institutional environment measuring instrument

The scale consisted of five items for regulatory environment, four items for the normative dimension and four for the cognitive environment. The items were measured using a five-point Likert scale in which one equals strongly agree and five equals strongly disagree.

3.4.2 Antecedents to SEI

The scale contained two concepts of perceived desirability and perceived feasibility developed from Mair and Noboa (2003) and further tested for validity in an emerging economy context by Ayob et al. (2013). This scale consisted of three items for measuring both perceived desirability and perceived desirability on a five-point Likert scale where one equals strongly agree and five equals strongly disagree.

3.4.3 SEI measuring instrument

The scale consisted of nine items adopted from Linan and Chen (2006) used by Liñán (2008), and Guerrero, Lavín and Álvarez (2009). The EI questionnaire designed by Liñán and Chen (2009) was validated in developing and developed countries, for example, Guerrero, Rialp and Urbano (2008), and Malebana and Swanepoel (2015). Table 6 illustrates the structure of the research instrument, which is included in Appendix A.

Table 6 : Structure of the questionnaire

Items	Construct	Dimension
1-4	Descriptive & control variable	Gender, age, level of education, home language, faculty, current economic activity and prior exposure
2 (i-v)	Institutional regulatory environment	Perceptions of regulatory environment
2 (vi –x)	Institutional cognitive environment	Perceptions of cognitive environment
2 (xi- xiv)	Institutional normative environment	Perceptions of normative environment
3 (i-iii)	Antecedents of SEI	Perceived feasibility
3 (iv-vi)	Antecedents of SEI	Perceived desirability
4	SEI	Entrepreneurial intentions

3.5 Data collection procedure

The questionnaire was compiled in October and November 2015, online on Qualtrics, an online survey application. The questionnaire was provided to lecturers at the three institutions for prior approval to distribute an email to their students with an invitation to participate. The procedure followed in the data gathering process, including the benefits and limitations, are discussed further in this section.

According to Cooper and Schindler (2014), there has been a shift toward computer assisted interviewing and data collection in the 21st century. Electronic surveying techniques are more efficient, compared with conventional data collection methods, and do not compromise the quality of data (Babbie & Mouton, 2009; Nicholls, 2006). There are several challenges to self-administered surveys; costs, feasibility and time constraints, that the administering of electronic surveys can successfully overcome.

3.5.1 Electronic surveys

Electronic surveys possess distinct characteristics that influence research methodology in terms of demographics, sampling and response rates among other elements (Andrews, Nonnecke & Preece, 2003). The popularity and use

of electronic surveys has increased significantly over the past two decades with advancements in technology and the internet (Babbie & Mouton, 2009; Yun & Trumbo, 2000).

Five methodological principles critical to the success of online surveys are identified by Andrews et al. (2003). In this research, these principles were adhered to during data collection as outlined in Table 7.

Table 7: Electronic survey techniques

Dimension	Tactic employed in this research
Survey design	– The survey was prepared and administered on Qualtrics – an online survey platform which is compatible on all browsers as well as mobile devices – Survey allowed for simple, easy to use interface – Automatic transfer of responses to database
Subject privacy and confidentiality	– An invitation to participate was extended via email and social media on their institution's pages – Consent to distribute the survey was sought from lecturers of the students – Consent to participate in the survey was included in the first page before the survey proceeded to the next screen. – The names of the individuals were not collected in the survey as the survey was anonymous
Sampling and subject selection	- Email invitations to participate were sent to all members of the population that the researcher had access to, hence reducing non-coverage.
Distribution and response management	- Information about the survey was communicated to the lecturers who in turn explained and emailed the students encouraging them to participate, thus increasing the response rate because of the credibility attached to the "leader" - The questionnaire was designed in a short compatible version to increase response rates - Follow up reminders were used to increase the response rate
Survey piloting	– The survey was tested and corrected for missing instructions, length, format appropriateness and question completeness by sending to colleagues and experts in the field

3.5.2 Advantages of online surveys

Cooper and Schindler (2014), supported this outline stating the key advantages of online-based survey as a method of interviews were the inclusion of respondents across geographic areas and the lower cost, especially for the computer literate.

3.5.3 Disadvantages of online surveys

The disadvantages of this data collection method are the low response rates and lack of interviewer intervention (Andrews et al., 2003). It is imperative that anonymity of the respondents be maintained to reduce the social desirability bias. An online survey, as well as hardcopy surveys, was made available to the target population in order to increase the response rate.

3.6 Pre-testing the research instrument

A survey was created on Qualtrics and distributed electronically to business students at WBS and Maharishi Institute. The pilot study acts as a feasibility study to assist a researcher to determine the practicality of their research methods (Cooper & Schindler, 2014), and clarify conceptual as well as operational issues in the research before launching (Babbie & Mouton, 2009).

During the pilot study, the race question was adjusted and refined to exclude ‘other’ as a category. Second, from a conceptual perspective, the antecedents of SEI were added to the questionnaire after results indicated that a positive but statistically insignificant relationship existed between the institutional environment (independent variable) and SEI (dependent variable). The questionnaire was given to two field experts for proof reading of concepts and form. Field experts indicated that the antecedents of SEI were likely to have a direct and significant relationship and including them in the pilot study would be beneficial

3.7 Data analysis

Cooper and Schindler (2014) describe data analysis as involving the reduction and sense making of data through the development of summaries, pattern searching and application of statistical methods to data. In accordance with this view, Yin (2013:109) defines data analysis as "examining, categorising, tabulating, testing, or otherwise recombining both quantitative and qualitative evidence to address the initial propositions of a study”.

Correlation analysis was performed to analyse the relationships between the constructs (Cooper & Schindler, 2014). Structural equation modelling as well as a confirmatory factor analysis was conducted in accordance with Manalova et al. (2007). The previous researchers from whom the instruments have been adopted utilised factor analysis, multiple regression as well as structural equation modelling. These methods were employed in order to analyse the data and make meaningful inferences.

3.8 Validity and reliability of research design

The study by Manalova et al. (2007), to measure the validity and reliability of the scales, indicated significantly high reliability, internal consistency, and construct validity. Furthermore, Urban (2013) utilised the research instrument in measuring the influence of the institutional environment on self-efficacy.

A pilot study was conducted in September 2015 and changes to the final instrument were taken up as discussed above. By building on the same logic – this research utilised the same tool to measure the institutional profile of South Africa in relation to SEI and its antecedents.

3.8.1 External validity

Cooper and Schindler (2014), define external validity as the degree to which the study results can be generalised over time, in different settings and with other people. The decision to employ a non-probability sampling approach poses a limitation on the external validity of the study (Cooper & Schindler, 2014). In order to ensure external validity of this research instrument, various experts in the field were included in the research for the pilot study. The research instrument was found to be valid for South Africa by Urban (2013), and Malebana and Swanepoel (2015).

3.8.2 Internal validity

Internal validity is crucial in quantitative research because it ensures that the experiment design used follows the principle of cause and effect (Blaxter, 2003). It is concerned with the extent to which the constructs measure what they are intended to measure, this is to say if conclusions and relationships drawn from the research are accurate (Cooper & Schindler, 2014).

In order to measure internal validity Cronbach's Alpha was used, with the cut off being 0.7 (Lee, 2015); CFA was also utilised in order to ensure the validity (Dennick, 2011).

3.8.3 Reliability

According to Cooper and Schindler (2014:288), reliability measures "the extent to which the measurement is free from random error". Yin (1994) suggests that reliability measures the extent to which the technique can be depended upon for consistent results. The instrument was considered reliable by previous researchers in South Africa, Urban (2013) for institutional environment measurement scale, and Malebana and Swanepoel (2015) for the SEI measurement scales.

Validity differs from reliability because reliability's main concern is within the data collection process, ensuring that there is consistency of results and that the steps can be repeated. Validity on the other hand focuses on the ability of the results to support conclusions (Yin 1994). Yin (1994) suggests that in order to ensure the validity and reliability of research it is necessary to adhere to the following:

- Sequence of evidence;
- Use of an explanatory design or research instrument; and
- Research framework to include objectives, procedures and research questions.

Table 8: Validity and reliability criteria

Criteria	Description	Tactic employed
Construct validity	Truth - Concerned with establishing the correct operational measures for the concepts of interests in this case	Replication of logic by using a scale that has been used validated by Urban (2013) and Manalova et al. (2007) Tests – Cronbach's Alpha and Confirmatory factor analysis
Reliability	Trustworthiness - A demonstration that the data collection and analysis can be repeated for the same results. According to Cooper and Schindler (2014) reliability measures the extent to which the instrument measurement is free from random error	Using business students as a proxy for SE in line with the study conducted when the instrument was constructed and validated

3.9 Study limitations

This study inevitably has limitations; first, the focus on studying the formation of SEI from a student's perspectives; second, the samples used are not entirely representative of the population being considered, as South Africa a country more developed than most countries in sub-Saharan Africa. Third, a non-probability sampling technique was utilised, which limits the representativeness and generalisability of the results (Cooper & Schindler, 2014; Lee, 2015). Fourth, a cross sectional approach was used, which affects the findings of this research as intentions are developed over time (Krueger, 1993), a longitudinal analysis could facilitate better understanding of the constructs.

Limited research in the discourse of SE poses a limitation on the ability to find relevant data as well as a measuring instrument that is contextual and specific in order to address the research question. Time constraints were a significant threat to completion of the study.

3.10 Conclusion

This section discusses the methods design and processes followed in conducting this research. Particular attention was given to explaining the validity and reliability of the instrument. The research design of this study was formulated drawing from past research and adhering to principles of research. The data collection methods were described and the results of this study are discussed in Chapter 4.

CHAPTER 4: PRESENTATION OF RESULTS

The methodology for this study is discussed in Chapter 3, including the research instrument and data collection methods. Chapter 4 presents the findings of the research from the data gathered and an analysis of the relationships between the dependent variable, control variables and the independent environment. The first section presents the descriptive statistics, followed by results of the correlation and factor analyses, linear regression and equation modelling. This chapter ends with a summary of the hypotheses tested and their respective findings.

4.1 Introduction

Chapter 2 outlines theoretical underpinnings of this research, SEI theory and the institutional environment theory. There is a notable gap in the literature: the factors influencing the decision to become a social entrepreneur. Therefore, this research was aimed at investigating the influence of the external environment on SEI and its antecedents, perceived feasibility (PF) and perceived desirability (PD).

Chapter 3 describes how data for this study was collected, including the development of the research instrument following the logic of prior studies. In order to conduct data analysis, SPSS version 24 was used to perform the following:

a) *Descriptive statistics*: Description of demographic factors;

b) *Chi-square tests and t-tests*: Determination of associations among dependent and independent variables;

c) *Reliability analysis*: Cronbach's alpha was utilised to assess the reliability of measurement scales;

d) *Factor analysis*: conducted to assess smaller groups of latent variables, and test for validity; and

e) *Linear multiple regression*: Conducted to test the proposed model and hypotheses.

4.2 Demographic profile of respondents

There were 193 responses, of which 65 were incomplete and eliminated from the sample. In total 128 respondents were included in the final sample. Of the 128 respondents, 55 percent were male and 45 percent female. The dominant ethnic group in the sample was African (65 percent) followed by Indians (19 percent), coloureds (seven percent), white (5.4 percent) and Chinese (four percent).

The majority of the students were enrolled for either a degree (43 percent) or a postgraduate degree (38 percent). Only six percent were enrolled for diplomas and another 13 percent were enrolled for postgraduate diplomas. Most of the students were within the Commerce, Law and Management faculty (68 percent). Over half of the respondents indicated that they were full time students and not currently employed (55 percent), while 24 percent indicated that they work for private companies, seven percent worked in the public sector, another seven percent were entrepreneurs with partners, NGO or association (five percent), and the remaining respondents were independent workers (two percent).

More than half of the respondents have close family members who were either currently entrepreneurs or had been entrepreneurs (54 percent) and slightly above half of the respondents had been involved in a social enterprise/ initiative/ program (53 percent), while the other 47 percent had not been involved in any social enterprise. The average age of the respondents was 25.13 years with the youngest being 18 and the oldest 49 years old. The response rate was considerably low as, as up to 300 responses were anticipated, there was a 16 percent dropout rate and no feedback was received on the reason behind this.

4.3 Distribution of the data

Table 9 shows the descriptive statistics

Table 9: Descriptive statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statis-tic	Statis-tic	Statistic	Statis-tic	Std. Error	Statis-tic	Std. Error
Desirability	128	3.92	1.150	-1.308	.214	1.064	.425
Normative Environment	128	3.70	.817	-.747	.214	.646	.425
SEIs	128	3.42	.875	-.594	.214	.360	.425
Regulatory Environment	128	3.08	.808	.057	.214	-.325	.425
Feasibility	128	2.93	.728	-.449	.214	.018	.425
Cognitive Environment	128	2.88	.805	.161	.214	-.426	.425

1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree.

Respondents agreed the most with the desirability scale (mean = 3.92 out of 5), followed by normative environment (mean = 3.70), SEIs (mean = 3.42), then regulatory environment (mean = 3.08), feasibility (mean = 2.93) and the least rated was cognitive environment (mean = 2.88). The relationship between the constructs was initially assessed using correlation analysis.

The skewness and kurtosis for all the scales were within the acceptable range of between minus two and two, and thus the variables approximate the normal distribution. The Kolmogorov-Simonov test was conducted to test whether the variables were normally distributed. If the p-value is greater than 0.05 this indicates that the variable is normally distributed conversely, a p-value of less than 0.05 shows that the variable is not normally distributed.

Table 10 One-sample Kolmogorov-Smirnov test

	Regulatory Environment	Normative Environment	Cognitive environment	PF	PD	SEI
Test Statistic	.082	.142	.088	.088	.208	.077
Asymp. Sig. (2-tailed)	.034	.000	.016	.017	.000	.057

The results show that only SEI, the dependent variable (p-value 0.057) was normally distributed since the p-value for the one-sample Kolmogorov-Smirnov test was greater than 0.05. The rest of the variables were not normally distributed as the p-values showed.

A summated scale for each construct was computed by calculating the average of items that are within that construct. The descriptive statistics for each of the summated scales are shown in the following section.

4.4 Validity and reliability of the measurement scale

SEI was measured using a scale consisting of nine items adopted from Linan and Chen (2006). A four-item scale was used to measure the normative environment, a five-item scale was used to measure the regulatory environment, and the cognitive environment was measured using a four-item scale. Desirability was measured using a scale that consisted of three items, while feasibility was measured using a scale with five items. All the items on all the scales were measured on a five-point Likert scale (one equals strongly disagree and five equals strongly agree).

Factor analysis was carried out to assess the validity on constructs. Cooper and Schindler (2014), define external validity as the degree to which the study results can be generalised over time, in different settings and with other people. The convergent validity, shown by factor loadings provided in the factor analysis output, refers to the amount of weight assigned to the factor. Factor loadings less than 0.4 were considered insignificant and hence removed from the model, only significant factor loadings were included. Confirmatory factor analysis was used to assess the scale validity for each of the six constructs and Cronbach's Alpha was used to assess reliability of the scale for each of the constructs. The results are shown in Table 11.

The variable 'I would be tense' was eliminated from the PD construct because it was not highly correlated to the other items in the scale resulting in a Cronbach's Alpha of 0.555 and the removal of the item resulted in the Cronbach's alpha increasing to 0.876.

Table 11 : Construct Validity and Reliability

Construct	Items	Construct Validity		Reliability
		Factor loading	Total Variance Explained by Construct	Cronbach's Alpha
Regulatory Environ-ment	Government organizations assist individuals in starting their own businesses	0.835	63.85	0.857
	Government sets aside government contracts for new and small businesses.	0.746		
	Local and national government have support for individuals starting a new business.	0.795		
	Government sponsors organizations that help new businesses develop	0.844		
	Even after failing, government assists entrepreneurs starting again.	0.770		
Normative Environ-ment	Turning new ideas into businesses is admired in this country	0.755	63.15	0.801
	In this country, innovative and creative thinking is viewed as a route to success.	0.816		
	Entrepreneurs are admired in this country	0.806		
	People in this country greatly admire those who start own businesses	0.800		
Cognitive Environ-ment	Individuals know how to protect a new business legally.	0.802	68.29	0.843
	Those who start new businesses know how to deal with risk.	0.860		
	Those who start new businesses know how to manage risk	0.866		
	Most people know where to find info about markets for their products.	0.774		
PD	I would love it	0.943	89.01	0.876
	I would be enthusiastic	0.943		
PF	I know enough to start a social business	0.799	50.49	0.751
	It would be very easy	0.750		
	I would be certain of success	0.739		
	I am sure of myself	0.684		
	I would not be overworked	0.557		
Social Entrepreneurial Intentions	I am determined to create a social entrepreneurial venture in the future	0.902	65.66	0.932
	I have very seriously thought of starting a social enterprise in the future	0.873		
	I have a strong intention to start a social enterprise in the future	0.860		
	My professional goal is to be an social entrepreneur	0.852		
	I will make every effort to start and run my own social enterprise	0.846		
	I do not have doubts about ever starting my own social enterprise in the future	0.832		
	My qualification has contributed positively towards my interest in starting a social enterprise	0.759		
	I am ready to do anything to be an social entrepreneur	0.679		
	I had a strong intention to start my own social enterprise before I started with my qualification	0.652		

The results for factor analysis indicated that all the items on each scale loaded highly on their respective constructs except for the item ‘I would be tense’, which was removed from the desirability scale construct since it had an anti-image correlation of 0.127 (less than 0.4, the cut off). Thus, the desirability scale ended up with two items on the scale. The Regulatory Environment construct explained 63.85 percent of variation in the item scores, NE (63.15 percent), CE (68.29 percent), PD (89.21 percent), PF (50.49 percent) and SEI (65.68 percent).

The Cronbach’s alpha coefficients were 0.857 for regulatory environment, normative environment (0.801), and cognitive environment (0.843), PD (0.876), PF (0.751) and SEI (0.932). These values were all greater than 0.7, the cut off for good internal consistency. This implied that there was very high level of reliability, which is an indication that the items in each of the four scales could be combined together to form a summated scale for each construct.

4.5 Correlation analysis

Correlations are a mechanism to measure the strength of a linear association between variables (Lee, 2015). The correlations are measured to vary between minus one and one; Cohen (1988), explains that negative correlations are inverse and result when an increase in one variable results in a reduction in the other. The reverse is true for positive relationships where the strength is determined by its closeness to one (Lee, 2015). Correlations greater that .80 reflect a stronger association and conversely those closer to zero indicate a weak relationship or no relationship at all. The Pearson’s correlation coefficient was used to assess the relationship among the constructs.

Table 12 : Pearson's Correlation

		Regulatory Env.	Normative Env.	Cognitive Env.	PF	PD	SEI
Regulatory Env.	Pearson Correlation	1					
Normative Env.	Pearson Correlation	.402**	1				
Cognitive Env.	Pearson Correlation	.299**	.305**	1			
PF	Pearson Correlation	.282**	.148	.152	1		
PD	Pearson Correlation	-.011	.015	-.073	.271**	1	
SEI	Pearson Correlation	.172	.035	-.061	.065	-.031	1

**. Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis indicated that no significant relationship existed between any of the variables, regulatory environment, normative environment and cognitive environment, desirability and feasibility, with SEI. It can be noted that the correlations were not extremely high, hence it was concluded that there was no danger of multicollinearity. The next test undertaken was the confirmatory factor analysis, to assess the factor structure of a set of observed variables (Lee, 2015).

4.6 Confirmatory factor analysis (CFA)

CFA was conducted to assess the structure of the observed measures based on the items that were retained after the initial exploratory factor analysis. The CFA was carried out using Amos 21. This is represented diagrammatically in Figure 4.

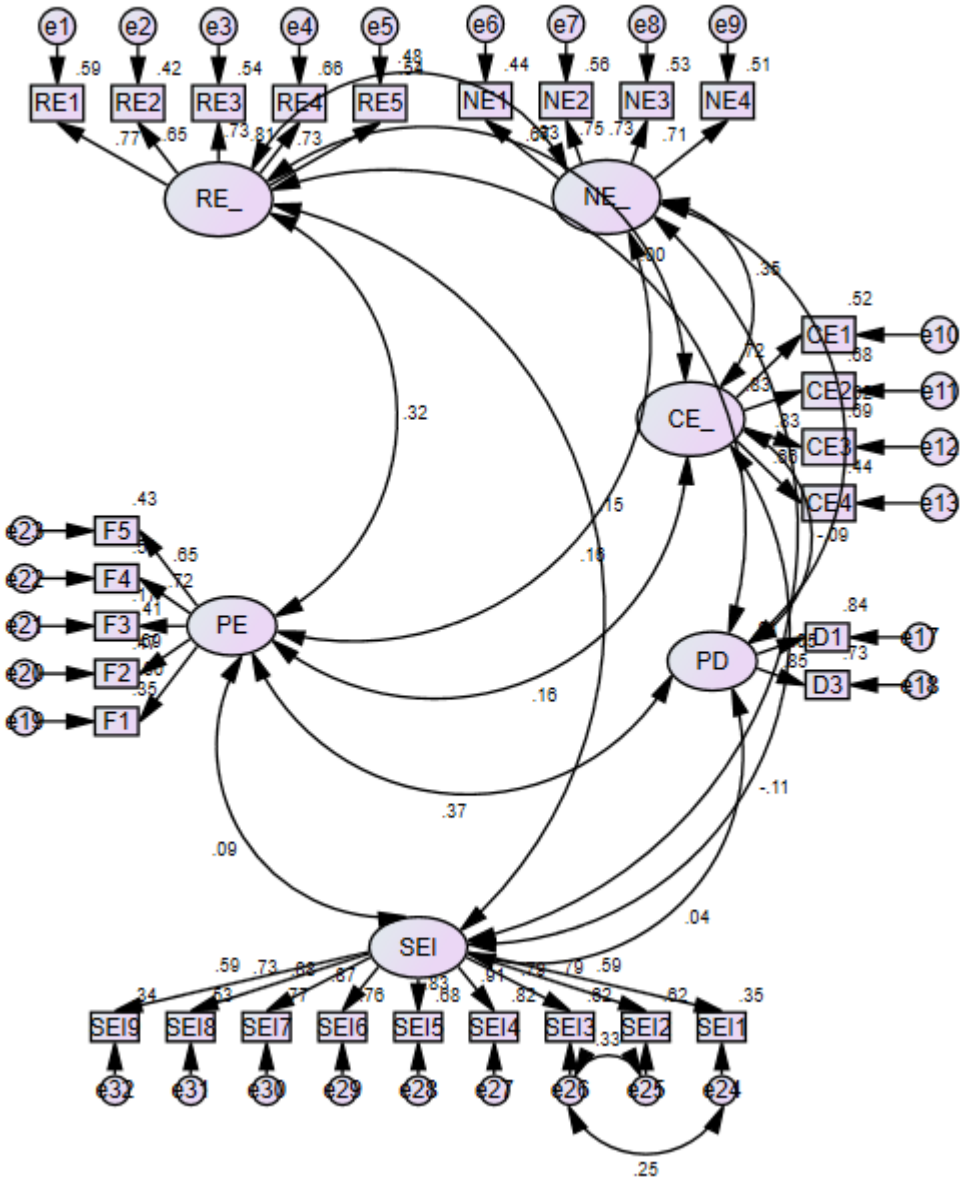


Figure 4: Confirmatory factor analysis

The chi-square, χ^2 value was 610.007 with a p-value of 0.000. This was an indication of poor fit because the χ^2 tests showed if there were significant differences between the actual and predicted covariance. The ideal would be to have an insignificant χ^2 (p-value > 0.05) but with large sample sizes, the value becomes significant regardless of fit.

The Bentler's Comparative fit index (CFI) value was 0.874, while the non-normed fit index (NNFI) also referred to as the TLI was 0.858. These statistics showed a possible poor fit since the cut-off point is > 0.9 for a reasonable fit and

>0.95 for best fit. These indices were not used in isolation, the root mean square error approximation (RMSEA) was 0.074 (90 percent CI = 0.064 – 0.084). This suggested that although the model is not a best fit (RMSEA > 0.05), but, it is still a reasonable fit, since the value is acceptable as it is below 0.08. The results are shown in Tables 13, 14 and 15.

Table 13: CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	75	610.007	360	.000	1.694
Saturated model	435	.000	0		
Independence model	29	2391.887	406	.000	5.891

Table 14: Baseline comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.745	.712	.877	.858	.874
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Table 15: RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.074	.064	.084	.000
Independence model	.196	.189	.204	.000

Further tests were conducted to investigate the relationships between the independent variable, the dependent variable and control variables in this study. Initially, the relationship between the dependent variables and control variables was analysed then multiple linear regression was conducted to assess the hypothesised relationships within different categories of respondents namely gender, prior experience in a social enterprise and age. The dependent variable was SEI, while the independent variables were regulatory environment, normative environment and cognitive environment.

4.7 Control variables versus dependent variables

The following section discusses the influence of the control variables on the dependent variables; analysis was conducted to put the findings into perspective within the South African context.

4.7.1 Gender and SEI

The results revealed that the mean SEI was higher for female respondents (mean = 3.577) compared to that of male respondents (mean = 3.290). The difference between the two was not statistically significant since the p-value is greater than 0.05 (p-value = 0.064). Thus, it was concluded that there is no relationship between gender and SEIs. An independent sample t-test was conducted and the results are shown in Table 16.

Table 16: Independent samples t-test of SEI by gender

Group Statistics						Independent samples t-test	
	Gender	N	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
SEIs	Male	71	3.290	0.920	0.109	-1.866	0.064
	Female	57	3.577	0.794	0.105		

4.7.2 Prior exposure to SEI

The results revealed that the mean SEI was significantly higher for students who have been involved in a social enterprises / initiatives / programs (mean = 3.624) than those who have not been involved in social enterprises / initiatives / programs (mean = 3.183). This was indicated by the p-value that was less than 0.05 (p-value = 0.004). Thus, it was concluded that there was a relationship between involvement in social enterprise and SEIs. An independent sample t-test was conducted and the results are shown in Table 17.

Table 17: Independent samples t-test of SEI by prior involvement

Group Statistics						Independent samples t-test	
	Have been involved in a social enterprise/ initiatives / programs	N	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
SEIs	Yes	68	3.624	.855	.104	2.929	0.004
	No	60	3.183	.844	.109		

The results revealed that the mean SEI was slightly higher for students with prior exposure to entrepreneurship (mean = 3.50) compared to those without prior exposure to entrepreneurship (mean = 3.32). The difference between the two was however not statistically significant since the p-value was greater than 0.05 (p-value = 0.246). Thus, it was concluded that there was no relationship between prior exposure to entrepreneurship and SEIs. An independent sample t-test was conducted and the results are shown in Table 18.

Table 18: Independent samples t-test of SEI by prior exposure

Group Statistics						Independent samples t-test	
	Prior exposure to entrepreneurship	N	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
SEIs	Yes	69	3.50	.921	.111	1.166	0.246
	No	59	3.32	.814	.106		

4.7.3 Faculty and SEI

The humanities faculty (mean = 3.84) had students with the highest SEI followed by the Health sciences (mean = 3.67) and sciences faculties (mean = 3.52). The lowest SEI was recorded for the engineering and built environment faculty (mean = 3.35). Descriptive statistics were conducted and the results are shown in Table 19.

Table 19: Descriptive statistics for SEI per faculty

Faculty	N	Mean	Std. Deviation	Std. Error
Humanities	7	3.84	.505	.191
Health Sciences	3	3.67	.729	.421
Sciences	13	3.52	.664	.184
Commerce, Law and Management	87	3.37	.935	.100
Engineering and built environment	18	3.35	.848	.200
Total	128	3.42	.875	.077

Table 20: ANOVA Table SEI against faculty

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.840	4	.460	.593	.668
Within Groups	95.315	123	.775		
Total	97.154	127			

One way Analysis of Variance (ANOVA) shows whether the differences are statistically significant. It can be noted from the ANOVA table (Table 20) that the differences in SEI per faculty are not significant at five percent significance level since the p-value of the F-test was 0.686 which is greater than 0.05. Thus it could be concluded that there no association between faculty and SEIs.

4.7.4 Current economic activity and SEI

Independent workers (mean = 4.33) had students with the highest SEI followed by those in the public sector (mean = 3.74) and NGO or associations (mean = 3.56). The lowest SEI was recorded for the students within private companies (mean = 3.18). Descriptive statistics were conducted and the results are shown in Table 21.

Table 21: Descriptive statistics for SEI by current economic activity

Current economic activity	N	Mean	Std. Deviation	Std. Error
Independent worker	2	4.33	0.943	0.667
Public sector	9	3.74	0.722	0.241
NGO or association	6	3.56	0.455	0.186
Student	71	3.46	0.764	0.091
Entrepreneur with partners	9	3.31	1.065	0.355
Private company	31	3.18	1.100	0.198
Total	128	3.42	0.875	0.077

Table 22: ANOVA Table SEI against current economic activity

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.772	5	.954	1.260	.285
Within Groups	92.382	122	.757		
Total	97.154	127			

The results showed that the differences in SEI by current economic activity are not statistically significant at five percent significance level since the p-value of the F-test was 0.285 which is greater than 0.05. Thus, it could be concluded that there was no association between current economic activity and SEIs. The ANOVA table shows whether the differences are statistically significant or not. One way Analysis of Variance (ANOVA) was conducted and the results are shown in Table 22.

4.8 Multiple regression

Table 23: Multiple regression results for environmental factors, PD and PF against SEI by gender and age

		Overall Sample	Gender		Age Group 1		Age Group 2	
			Female	Male	18 - 24 years	25 years & above	30 years & below	Above 30 years
	n=	128	57	71	71	57	114	14
		Model 1	Model 1	Model 2	Model 5	Model 6	Model 7	Model 8
Regulatory environment	Standard-ised Beta	0.204	0.104	0.116	0.118	0.206	0.172	0.207
	t-value	2.004	0.618	0.817	0.888	1.251	1.577	0.734
	P-value	0.047	0.539	0.417	0.378	0.217	0.118	0.484

		Overall Sample	Gender		Age Group 1		Age Group 2	
			Female	Male	18 - 24 years	25 years & above	30 years & below	Above 30 years
	n=	128	57	71	71	57	114	14
		Model 1	Model 1	Model 2	Model 5	Model 6	Model 7	Model 8
Normative environment	Standard-ised Beta	-0.014	-0.015	0.054	-0.166	0.092	-0.008	-0.170
	t-value	-0.139	-0.103	0.373	-1.293	0.591	-0.080	-0.611
	P-value	0.890	0.918	0.710	0.200	0.557	0.936	0.558
Cognitive environment	Standard-ised Beta	-0.128	-0.011	-0.154	-0.091	-0.165	-0.107	-0.488
	t-value	-1.338	-0.076	-1.170	-0.712	-1.153	-1.073	-1.215
	P-value	0.183	0.939	0.246	0.479	0.254	0.286	0.259
Perceived Feasibility	Standard-ised Beta	0.042	0.320	-0.135	0.156	-0.063	0.123	-0.535
	t-value	0.439	2.074	-0.907	1.190	-0.427	1.200	-1.813
	P-value	0.662	0.043	0.368	0.238	0.671	0.233	0.107
Perceived Desirability	Standard-ised Beta	-0.049	0.034	-0.034	-0.163	0.065	-0.102	0.056
	t-value	-0.531	0.254	-0.230	-1.291	0.453	-1.051	0.141
	P-value	0.596	0.800	0.819	0.201	0.653	0.296	0.891
R-square		0.047	0.146	0.061	0.081	0.084	0.056	0.467
ANOVA	F-Value	1.195	1.746	0.838	1.146	0.929	1.289	1.399
	P-Value	0.316	0.141	0.528	0.346	0.470	0.274	0.320

Table 24: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.216[a]	.047	.008	.87131

a. Predictors: (Constant), Desirability, Regulatory Environment, Cognitive Environment, Feasibility, Normative Environment

b. Dependent Variable: SEIs

Table 25: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.534	5	.907	1.195	.316[b]
	Residual	92.620	122	.759		
	Total	97.154	127			

a. Dependent Variable: SEIs
b. Predictors: (Constant), Desirability, Regulatory Environment, Cognitive Environment, Feasibility, Normative Environment

Table 26: Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	3.190	.524		6.086	.000		
Regulatory Environment	.220	.110	.204	2.004	.047	.758	1.320
Normative Environment	-.015	.106	-.014	-.139	.890	.799	1.251
Cognitive Environment	-.139	.104	-.128	-1.338	.183	.857	1.167
Feasibility	.051	.116	.042	.439	.662	.837	1.195
Desirability	-.037	.071	-.049	-.531	.596	.908	1.101

a. Dependent Variable: SEIs

The multiple linear regression results showed that the regulatory environment (standardised beta, β = 0.204, p-values = 0.047) was significantly related to SEIs, since the p-value was greater than 0.05. On the other hand, normative environment (β = -0.014 = p-values = 0.890), cognitive environment (p-value = 0.183), feasibility (β = 0.042, p-value = 0.662), and desirability (β = -0.049, p-value = 0.596) were not significant contributors to the prediction of SEIs. The model showed that the regulatory environment, normative environment, cognitive environment, perceived feasibility and desirability could predict only 4.7 percent of variation in SEI (r-square = 0.047). The overall model was not significant since the overall p-value = 0.316.

Table 27 : Regression weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
Feasibility	<---	Regulatory Environment	.227	.085	2.657	.008
Feasibility	<---	Normative Environment	.023	.085	.268	.789
Feasibility	<---	Cognitive Environment	.062	.082	.755	.450
Desirability	<---	Normative Environment	.048	.133	.361	.718
Desirability	<---	Cognitive Environment	-.152	.130	-1.169	.242
Desirability	<---	Regulatory Environment	-.113	.138	-.816	.414
SEIs	<---	Feasibility	.051	.114	.447	.655
SEIs	<---	Desirability	-.037	.069	-.542	.588
SEIs	<---	Regulatory Environment	.220	.108	2.044	.041
SEIs	<---	Normative Environment	-.015	.104	-.142	.887
SEIs	<---	Cognitive Environment	-.139	.102	-1.365	.172

Table 28 : Standardized regression weights: (Group number 1 - Default model)

			Estimate
Feasibility	<---	Regulatory Environment	.251
Feasibility	<---	Normative Environment	.025
Feasibility	<---	Cognitive Environment	.069
Desirability	<---	Normative Environment	.034
Desirability	<---	Cognitive Environment	-.106
Desirability	<---	Regulatory Environment	-.079
SEIs	<---	Feasibility	.042
SEIs	<---	Desirability	-.049
SEIs	<---	Regulatory Environment	.204
SEIs	<---	Normative Environment	-.014
SEIs	<---	Cognitive Environment	-.128

Table 29: Covariance: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
Normative Environment	<-->	Regulatory Environment	.264	.063	4.206	***
Normative Environment	<-->	Cognitive Environment	.199	.061	3.292	***
Regulatory Environment	<-->	Cognitive Environment	.193	.060	3.229	.001

The multiple correlations showed that the variables in the model could explain 8.5 percent variation in perceived feasibility, 9.2 percent variation in perceived desirability and 4.7 percent variation SEIs as shown in Table 30.

Table 30 : Squared multiple correlations: (Group number 1 - Default model)

	Estimate
Feasibility	.085
Desirability	.092
SEIs	.047

Table 31: Standardised direct, indirect and total effects

		Feasibility	Desirability	SEIs
Cognitive Environment	Direct Effects	.069	-.106	-.128
	Indirect Effects	.000	.021	.007
	Total Effects	.069	-.085	-.121
Normative Environment	Direct Effects	.025	.034	-.014
	Indirect Effects	.000	.008	-.001
	Total Effects	.025	.042	-.015
Regulatory Environment	Direct Effects	.251***	-.079	.204**
	Indirect Effects	.000	.077	.011
	Total Effects	.251***	-.003	.214**
Feasibility	Direct Effects	.000	.304***	.042
	Indirect Effects	.000	.000	-.015
	Total Effects	.000	.304***	.027
Desirability	Direct Effects	.000	.000	-.049
	Indirect Effects	.000	.000	.000
	Total Effects	.000	.000	-.049

The individual contribution of each construct to the model are discussed in the sections that follow.

4.10 Results pertaining to Hypotheses

Structural equation modelling results showed that the relationship between regulatory environment and feasibility (β = 0.251, t-value = 2.657, p-value = 0.008), regulatory environment and SEI (β = 0.204, t-value = 2.04, p-value = 0.041) as well as feasibility and desirability (β = 0.304, t-value = 3.44, p-value < 0.001) was positive and significant.

Relationships between normative environment and PF (β = 0.025, t=0.268, p-value=0.789), cognitive environment and PF (β = 0.069, t=0.755, p-value=0.450), normative environment and PD (β = 0.034, t=0.361, p-value=0.718), PF and SEI (β = 0.042, t=0.447, p-value=0.655) were positive but insignificant.

On the other hand the relationship between regulatory environment and PD (β = -0.079, t = - 0.816, p-value = 0.414), cognitive environment and PD (β = -0.106, t = -1.169, p-value = 0.242), desirability and SEI (β = -0.049, t = -0.542, p-value = 0.588), normative environment and SEI (β = -0.014, t = -0.142, p-value = 0.887), cognitive environment and SEI (β = -0.128, t=-1.365, p-value=0.172) were all negative and insignificant.

4.10.1 Hypothesis 1: Regulatory environment, feasibility, desirability with SEI

Hypothesis 1: Perceptions of the regulatory environment influences SEI through a) perception of feasibility, and b) perception of desirability.

Hypothesis 1^a null: There is no relationship between perceptions of the regulatory environment and SEIs.

Hypothesis 1^a: There is a positive relationship between perceptions of the regulatory environment and SEIs.

The results (standardised Beta = 0.204, t-value = 2.044 and p-values = 0.041 < 0.05) showed that Hypothesis 1^a was supported since the p-value was less than 0.05. Thus, it was concluded that there was a positive relationship between perceptions on regulatory environment and SEIs.

Hypothesis 1^b null: There is no relationship between perceptions of the regulatory environment and perceived feasibility.

Hypothesis 1^b: There is a positive relationship between perceptions of the regulatory environment and perceived feasibility.

The results (standardised Beta = 0.251, t-value = 2.657 and p-values = 0.008 < 0.05) showed that hypothesis 1^b was supported since the p-value was less than 0.05. Thus, it was concluded that there was a positive relationship between perceptions of the regulatory environment and perceived feasibility.

Hypothesis 1^{c} Null: There is no relationship between perceptions of the regulatory environment and perceptions of desirability.

Hypothesis 1^{c}: There is a positive relationship between perceptions of the regulatory environment and perceptions of desirability.

The results (standardised Beta = -0.079, t-value = -0.816 and p-values = 0.414 > 0.05) showed that Hypothesis 1^{c} was not supported since the p-value was greater than 0.05. Thus, it was concluded that there was no relationship between perceptions of the regulatory environment and perceived desirability.

4.10.2 Hypothesis 2: Normative environment, feasibility, desirability and SEI

Hypothesis 2: Perceptions of the normative environment influences SEI through a) perception of feasibility, and b) perception of desirability.

Hypothesis 2^{a} Null: There is no relationship between perceptions of the normative environment and SEI.

Hypothesis 2^{a}: There is a positive relationship between perceptions of the normative environment and SEI.

It could be noted that the results (standardised Beta = -0.014, t-value = -0.142 and p-values = 0.887 > 0.05) showed that Hypothesis 2^{a} was not supported since the p-value was greater than 0.05 (the significance level). Thus, it was concluded that there was no relationship between perceptions on normative environment and SEI.

Hypothesis 2^{b} Null: There is no relationship between perceptions of the normative environment and perceptions of feasibility.

Hypothesis 2^{b}: There is a positive relationship between perceptions of the normative environment and perceptions of feasibility.

The results (standardised Beta = 0.025, t-value = 0.268 and p-values = 0.789 > 0.05) showed that Hypothesis 2^{b} was not supported since the p-value was

greater than 0.05 (the significance level). Thus, it was concluded that there was no relationship between perceptions on normative environment and feasibility.

Hypothesis 2^{c} Null: There is no relationship between perceptions of the normative environment and perceptions of desirability.

Hypothesis 2^{c}: There is a positive relationship between perceptions of the normative environment and perceptions of desirability.

The results (standardised Beta = 0.034, t-value = 0.361 and p-values = 0.718 > 0.05) showed that Hypothesis 2^{c} was not supported since the p-value was greater than 0.05. Thus, it was concluded that there was no relationship between perceptions on normative environment and perceived desirability.

4.10.3 Hypothesis 3: Cognitive environment, feasibility, desirability and SEI

Hypothesis 3: Perceptions of the cognitive environment influences SEI through a) perception of feasibility, and b) perception of desirability.

Hypothesis 3^{a} Null: There is no relationship between perceptions of the cognitive environment and SEIs.

Hypothesis 3^{a}: There is a positive relationship between perceptions of the cognitive environment and SEIs.

The results (Beta = -0.128, t-value = -1.365, and p-value = 0.172 > 0.05) showed that Hypothesis 3^{a} was not supported. Thus, it was concluded that there was no relationship between perceptions on cognitive environment and SEIs.

Hypothesis 3^{b} Null: There is no relationship between perceptions of the cognitive environment and perceptions of feasibility.

Hypothesis 3^{b}: There is a positive relationship between perceptions of the cognitive environment and perceptions of feasibility

The results (Beta = 0.069, t-value = 0.755, and p-value = 0.450 > 0.05) showed that Hypothesis 3^b was not supported. Thus, it was concluded that there was no relationship between perceptions on cognitive environment and perceived feasibility.

Hypothesis 3^c Null: There is no relationship between perceptions of the cognitive environment and perceptions of desirability.

Hypothesis 3^c: There is a positive relationship between perceptions of the cognitive environment and perceptions of desirability.

The results (Beta = -0.106, t-value = -1.169, and p-value = 0.242 > 0.05) showed that Hypothesis 3^c was not supported. Thus, it was concluded that there was no relationship between perceptions on cognitive environment and perceived desirability.

4.10.4 Hypothesis 4: Desirability and SEI

Hypothesis 4 Null: There no relationship between perceptions of desirability and SEIs.

Hypothesis 4: There is a positive relationship between perceptions of desirability and SEIs.

The results (standardised beta = -0.049, t-value = -0.542 and p-value = 0.588 > 0.05) showed that Hypothesis 4 was not supported. Thus, it was concluded that there was no relationship between perceptions on desirability and SEIs.

4.10.5 Hypothesis 5: Feasibility and SEI

Hypothesis 5: There no relationship between perceptions of feasibility and SEIs.

Hypothesis 5: There is a positive relationship between perceptions of feasibility and SEIs.

The results (standardised beta = 0.042, t-value = 0.447 and p-value = 0.655 > 0.05) showed that Hypothesis 5 was not supported. Thus, it was concluded that there was no relationship between perceptions on feasibility and SEIs.

Table 32 : Summary of hypotheses

Hypotheses				β	T (F-value)	P	Result
H1[a]	Regulatory Environment	--->	SEIs	0.204	2.044	0.041	Supported
H1[b]	Regulatory Environment	--->	Feasibility	0.251	2.657	0.008	Supported
H1[c]	Regulatory Environment	--->	Desirability	-0.079	-0.816	0.414	Not Supported
H2[a]	Normative Environment	--->	SEIs	-0.014	-0.142	0.887	Not Supported
H2[b]	Normative Environment	--->	Feasibility	0.025	0.268	0.789	Not Supported
H2[c]	Normative Environment	--->	Desirability	0.034	0.361	0.718	Not Supported
H3[a]	Cognitive Environment	--->	SEIs	-0.128	-1.365	0.172	Not Supported
H3[b]	Cognitive Environment	--->	Feasibility	0.069	0.755	0.45	Not Supported
H3[c]	Cognitive Environment	--->	Desirability	-0.106	-1.169	0.242	Not Supported
H4	Feasibility	--->	SEIs	0.042	0.447	0.655	Not Supported
H5	Desirability	--->	SEIs	-0.049	-0.542	0.588	Not Supported

Table 33: Control variables versus dependent variable

Control Variable	Dependent Variable	T (F-value)	P	Result
Gender	SEIs	-1.866	0.064	No association
Involvement in social enterprise	SEIs	2.929	0.004	Positive and significant association
Prior Exposure	SEIs	1.166	0.246	No association
Faculty	SEIs	0.593	0.668	No association
Current economic activity	SEIs	(1.260)	0.285	No association

The results, split by age and gender, revealed no significant relationship between each of the variables; RE, NE, CE, PF, and PD, and SEI for all subgroups.

4.11 Conclusion

This chapter discussed the results of the data collected to determine the validity and reliability of the research instruments, and measure the influence of institutional environmental factors on SEIs. There was a modest variance between the dependent and independent variables, as well as negative effects, which implied that the institutional environment might not explain SEI in South Africa. The relationship between the regulatory environment and perceived desirability, normative environment and SEI, cognitive environment, perceived desirability and were found to be negative. The antecedents of SEI – perceptions of feasibility and desirability were found to have no association with SEI. Chapter 5 discusses the findings relative to empirical evidence and makes conclusions on the findings.

CHAPTER 5: DISCUSSION OF THE RESULTS

It is critical that the development of SEI among students in emerging economies was examined in order to understand the relationships in context and thus increase SEA. An increase in SEI would be beneficial to developing countries, as social challenges become complex and the need for innovative solutions that contribute to sustainable economic and social development.

5.1 Introduction

This chapter examines the results presented in Chapter 4 and relates the research findings to existing literature, drawing conclusions on the influence of the environment on SEI and its antecedents.

5.2 Demographic profile of respondents

The survey was circulated among students enrolled at higher and tertiary institutions in Gauteng. The online survey method of data collection was employed, with a convenience sample being drawn through lecturers who forwarded the electronic link to their students. A total of 193 respondents participated in the survey and only 128 of these responses were usable.

The demographic information collected from the survey was aimed at investigating the critical control variables as identified in literature: education, race, gender, exposure, and family background. Although demographic factors may not have a direct relationship with SEI, they could assist in establishing their effect on perceived feasibility and perceived desirability, which in turn influence SEI (Linan et al., 2005). Literature suggests that demographic factors have indirect influence through the antecedents of SEI (Goethner, Obschonka, Silbereisen & Cantner, 2012). Three of the examined control variables are discussed in the sections that follow.

5.2.1 Gender

Empirical evidence reports mixed findings in entrepreneurial intent research concerning the influence of gender. The results of this research indicated that females possessed a higher mean for SEI, although the relationship between gender and SEI was statistically insignificant, it is interesting to note that, a larger number of females exhibited high levels of SEI, as compared with males. The findings of this research contradicted findings in this field, Malebana and Swanepoel (2015) found males to be more likely to engage in entrepreneurial behaviour, although not significant to account for variance in entrepreneurial intent. In addition, the GEM report of 2009 (Bosma & Levie, 2009) found that, males were more likely to engage in social ventures than females, with this ratio varying across countries. South Africa exhibited a gender gap in SEA that was narrower than the United States of America (Terjesen et al., 2012).

Terjesen et al. (2012) explains the gender gap as being influenced by economic development levels, arguing that, factor-driven economies tend to have a lower gap as compared with innovation-driven economies; South Africa is classified as an efficiency-driven economy. This could account for the marginal difference between males and females who indicated social entrepreneurial intent. In addition, the 2014 GEM report (Herrington & Kew, 2014) records a notable increase in opportunity driven entrepreneurship among females at 71 percent where the average in sub-Saharan Africa was 54 percent.

5.2.2 Education

The target population for this study was primarily students at higher and tertiary education facilities. Categories were included in the questionnaire to determine whether the level of study and faculty of study had any influence on the relationships between the independent and dependent variable. Data on the respective faculties was collected to identify any relationship with SEI or its antecedents, to find out if particular courses enhanced or increased SEI.

The results indicated that the level of education or faculty had no association with SEI. Terjesen et al. (2012) found that the level of education influenced the decision and likelihood to engage in SEA. Individuals who had completed high school with some form of post-secondary education exhibited higher levels of SEA. This was supported by the findings of this research, which indicated a high level of SEI among tertiary level students.

Although the focus of this study was on higher and tertiary education students, the findings offer interesting insights, in relation to faculties that exhibited the highest levels of SEI. The humanities faculty and the commerce faculty indicated higher levels of SEI, this is aligned with a study by Urban (2013) that found that the commerce faculty showed the highest levels of SEI. This is encouraging, considering that prior studies attribute low SEA and TEA to poor education and lack of skills (Turton & Herrington, 2013; Urban, 2013).

Critics argue that training and education have no influence on the perceptions of opportunity, suggesting that perceptions are not altered in the short-term (Vidal-Suñé & Lopez-Panisello, 2013). Contrary to that, the findings of the study by Bernardino et al. (2015) highlight the possibility of raising awareness and improving perceptions of feasibility and desirability through offering educational training to students. They further argue that by engaging with the civil society, educational institutions can promote interest and consequently influence the decision to become a social entrepreneur (Bernardino et al., 2015).

5.2.3 Prior exposure

The findings indicated that respondents who had been exposed to SE through direct involvement or exposure through family background had high levels of SEI. This finding is particularly encouraging because it indicates that SE exposure could be beneficial in the long-term, towards the development of positive perceptions of SE and SEI.

In light of the social and economic challenges in South Africa, it is particularly surprising that SE does not seem to receive attention in mainstream universities (Viviers et al., 2012).

5.3 Discussion pertaining to Hypothesis 1

5.3.1 Regulatory environment and SEI

The results of this study confirmed that the relationship between the regulatory environment and SEI is positive and significant. This finding is particularly crucial because it highlights the positive influence of regulations on the entrepreneurship. Literature confirms that the regulatory environment is either an inhibitor or an enabler in the development of entrepreneurship (Herrington & Kew, 2014). Further to that, it has been found that 'perceptions' of the regulatory environment have a strong influence on the decisions to engage in entrepreneurial behaviour.

However, these results are inconsistent with the findings of Shaw and Urban (2011), which showed a positive but insignificant correlation between the regulatory environment and levels of entrepreneurial intent. Interestingly, Valdez and Richardson (2013) found that the regulatory environment was negatively related to entrepreneurial activity concluding that an environment that was supportive increased the likelihood of opportunity motivated as opposed to necessity entrepreneurship. This finding is particularly interesting as entrepreneurial activity in South Africa is predominantly necessity-based.

Vidal-Suñé and Lopez-Panisello (2013), in their study on Spanish businesses suggested that more regulations resulted in positive perceptions of opportunity, which they attributed to the "long standing dependence by Spanish businesses on government supervision" (Vidal-Suñé & Lopez-Panisello, 2013:89), in order to erase uncertainty. The same can be concluded regarding the South African regulatory environment, a strong rule of law provides stability and supports SE

thereby influencing positive perceptions towards the regulatory environment and ultimately influences the level of SEI as well as SEA.

The South African government is responsible for national policies and legislation that forms part of the regulatory environment; the National Development Plan in South Africa is an example of a national policy that offers direction towards the creation of sustainable jobs and eradication of poverty, among other goals. Transformation and empowerment issues create opportunities within the regulatory environment, which can be manipulated by social entrepreneurs and facilitate robust growth of SE in South Africa (Littlewood & Holt, 2015; Urban, 2015).

5.3.2 Regulatory environment and perceived feasibility

The relationship between the regulative environment and perceptions of feasibility was found to be positively significant. The concept of feasibility aids understanding of the individual's perceptions of their ability to undertake and succeed in entrepreneurial behaviour. Terjesen et al. (2012) reports a low perceived capability among individuals in South Africa at 38 percent, which is substantially low as compared to other countries in sub-Saharan Africa. Furthermore, fear of failure is significantly high at 25 percent; this hinders perceptions of feasibility.

5.3.3 Regulatory environment and perceived desirability

The findings of this research indicated that the relationship between the regulatory environment and the perceptions of feasibility was positive but insignificant relationship. These results imply that there is a weak relationship contrary to the hypothesised relationship, also critical to note that research in this area is lacking. There is no evidence in literature to support or conceptualise this relationship and the findings pave way for further research in this field.

5.4 Discussion pertaining to Hypothesis 2

5.4.1 Normative environment and SEI

The findings indicate that there was a negative relationship between the perceptions of the normative environment and SEI. Prior studies found that a positive but insignificant relationship between perceptions of the normative environment and entrepreneurial intentions among students in South Africa (Shaw & Urban, 2011). The normative environment measures the social norms; the level of admiration or attraction to SEI (Arasti et al., 2012). However, several studies have indicated that South Africa possesses low SEA rates (Turton & Herrington, 2013) coupled with low capabilities.

Positive perceptions of the environment enable individuals to perceive the creation of a social venture as both feasible and desirable (Bernadino et al., 2013). The external environment may trigger perceptions of feasibility and desirability; however, other predictors account for the formation of SEI. The findings of this research in respect of the normative environment and the antecedents of SEI are noted.

5.4.2 Normative environment and perceived feasibility

Perceived feasibility refers to the belief that an individual possesses regarding their ability to create a social enterprise. This study hypothesised, based on empirical evidence, that there would be a positively significant relationship between the two variables. The relationship was found to be positive; however, statistically insignificant. This may be explained by the sample size used as well as the overlap between the concepts of norms and feasibility.

5.4.3 Normative environment and perceived desirability

There was a positive but insignificant relationship between the two variables Davidson (1997) suggested that the impact of norms varies across different cultures and countries. The studies by Urban (2008) regarding the normative

environment in South Africa indicated that the sense of entitlement as well as a dependence on government hindered entrepreneurial aspirations. The prevalent lack of skills, low exposure to entrepreneurship, as well as lack of access to funding, are contributory factors to the lack of interest in entrepreneurship in South Africa (Herrington et al., 2010). This weak relationship is therefore explained by the factors listed above; Bosma et al. (2009) further attributed the low SEA levels in South Africa to the reluctance of the people to engage in entrepreneurship.

5.5 Discussion pertaining to Hypothesis 3

5.5.1 Cognitive environment and SEI

The findings of this study indicated a negative relationship between perceptions of the cognitive environment and SEI. These findings are consistent with Shaw and Urban (2011); the negative relationship implies that the independent variable, cognitive environment, has reverse effects on SEI. This is true of the relationship between cognitive environment, perceived desirability and SEI.

This research finding is particularly interesting considering that low levels of TEA and SEA have been recorded in the GEM reports in South Africa. Urban (2015) suggests that the negative cognitive environment can be explained as the reluctance of the people in South Africa to engage in entrepreneurial activities. Bosma and Levie (2009) support this; the levels of interest in entrepreneurship were recorded as lowest in South Africa as compared with other countries across sub-Saharan Africa.

Urban (2012) further suggest that levels of self-efficacy and education have a significant influence on the cognitive environment in South Africa, concluding that in order to alter this negative influence, entrepreneurial education and training are critical in South Africa. Krueger (1993) argues that cognitions are at the heart of entrepreneurship and that the ability to identify opportunities and the perceptions thereof are critical for entrepreneurship.

This study hypothesised that there would be significant relationships between the cognitive environment and perceptions of feasibility and desirability. Cognitions have been found in prior studies as being supportive of perceptions of desirability and feasibility. Empirical evidence indicated that perceptions of feasibility and desirability were products of the cultural and social environment.

5.5.2 Cognitive environment and perceived feasibility

According to the results of this study, a positive but insignificant relationship exists between the variables. Guererro et al. (2008) suggest that perceived feasibility is synonymous with the concept of self-efficacy and this suggests an overlap between the concepts.

5.5.3 Cognitive environment and perceived desirability

There was a negative relationship between cognitions and perceived desirability, which implies that the environment had reverse effects on the perceptions of perceived desirability. Guerrero et al. (2008) suggests that students have more positive intrinsic motivation or desirability than necessity; however, this has not been validated in developing or emerging economies. The historical and contextual issues in South Africa influences levels of self-efficacy (Urban, 2013), which is a possible explanation to the findings of this research; students are most likely to choose other career paths, such as working for the government, rather than entrepreneurship (Viviers et al., 2012).

5.6 Discussion pertaining to Hypothesis 4

5.6.1 Perceived desirability and SEI

The findings indicated that the relationship between the perceptions of desirability and SEI was positive; however, this relationship is not statistically significant. Ayob et al. (2013) argue that feasibility does not have a direct relationship with intentions, instead a high perception in desirability leads to

increased feasibility, which results in positive SEIs. The findings of their research imply that increasing desirability of SE is critical in developing and stimulating intentions among university business students.

The implications of these findings are that there are other variables influencing this relationship contrary to empirical evidence, which supports the view that feasibility and desirability are the attitudes offering 'predictive validity' and predicting intentions significantly (Krueger, 1993). The findings of Weerakoon and Gunatissa (2014) also contradict the findings of this research and suggest that there is a positive relationship between perceptions of feasibility, desirability and ultimately SEI, this is consistent with findings of (Ayob et al., 2013; Linan, Urbano & Guerrero 2011; Wang, Lu & Millington, 2011).

The low predictive capacity of the attitudes of the students towards entrepreneurial intentions could possibly be attributed to the normative environment and cognitive environment, which had a negative relationship with the attitudes in this model.

5.7 Discussion pertaining to Hypothesis 5

5.7.1 Perceived feasibility and SEI

The findings were somewhat unexpected, indicating that there is a positive but statistically insignificant relationship between perceptions of feasibility and SEI, contradicting empirical research. Various findings in literature show that there is a positive and significant relationship between perceived desirability and feasibility and intentions (Schlaegel & Koenig, 2014). Furthermore, Wang et al. (2011) suggest that the association between perceived feasibility and entrepreneurial intention is positive. Higher perceptions of feasibility (self-efficacy) has been associated with higher entrepreneurial intention; studies by Urban (2013) and Ayob et al. (2013) support this notion in the emerging economy context. In addition, Linan and Chen (2009) found that there is a positive influence of perceived feasibility on entrepreneurial intention.

According to Fitzsimmons and Douglas (2011), SEI are generally influenced by other variables other than the direct effects of perceptions of feasibility and desirability, rather an interaction between the antecedents. The original work of Shapero and Sokol (1982) included the summation of the antecedents to the variable named, propensity to act (Krueger, 1993). Propensity to act exhibited a significant and positive relationship with SEI. This could explain the somewhat weak relationship, which was not anticipated; a summation of the scale could have yielder better results. Furthermore, Fitzsimmons and Douglas (2011) found that low perceptions of feasibility and desirability in students resulted in low SEI. However, the study noted that, students who exhibited low perceived feasibility showed a significant increase in SEI as perceived desirability increased. Conversely, among those students who exhibited high levels of perceived feasibility, SEI increased marginally as desirability increased.

5.8 Conclusion

The assumption of this study was that there is a significant association between the institutional environment and SEI, and its antecedents. These contextual variables were considered strong predictors of SEI. The hypothesis was formulated against this background; however, the results of this study contradict empirical evidence. The findings of this research suggest that the only significantly positive relationships are between the regulatory environment and perceived feasibility as well as SEI. The rest of the relationships are positive but statistically insignificant; except for normative environment and SEI, cognitive environment and SEI, cognitive environment and perceived desirability and lastly regulatory environment and perceived desirability, which are negatively related. These findings can be explained by the emerging context of South Africa, which is complex and provides new insights, which could be useful for further investigation concerning the perceptions of the institutional environment and SEI, as well as its antecedents.

CHAPTER 6: CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

6.1 Introduction

Chapter 6 draws conclusions from the results of this study and discusses the findings and the implications thereof. After a discussion of the conclusions of the study, in light of empirical research and literature, recommendations are provided to policy makers and educators, pertaining to the influence of institutional factors on SEI among tertiary level students in Johannesburg, South Africa.

6.2 Conclusions of the study

This research aimed to establish the influence of the South African context in terms of the institutional environmental factors on SEI among tertiary level students in Johannesburg. Empirical evidence shows that there is a positive relationship between the SEI and its antecedents as well as context (institutional environment).

SE is a relatively novel (Urban 2013) as well as under-researched field of study, particularly in sub-Saharan Africa (Viviers et al., 2012). There is growing interest in this field (Riviera-Santos, 2015), which has potential to solve some of this regions' persistent problems (Littlewood & Holt, 2014). Governments have failed to eradicate or alleviate poverty, inequality, underemployment and poor education; these institutional voids create opportunities for innovative social ventures created for social change (Karanda & Toledano, 2012; Mair & Marti, 2009).

Empirical research indicates that context influences entrepreneurial activity; this suggests that entrepreneurs do not operate in a vacuum and elements of their context has an influence on the 'who, when, why, what' of entrepreneurship. Busenitz et al. (2000) argue that SE is context embedded; this view implies that

the emergence and implementation of SE differs across different contexts. The institutional approach attempts to explain the influence of the external environmental factors on an individuals' decision to become an entrepreneur, referred to as entrepreneurial intention (Busenitz et al., 2000; Shapero and & Sokol, 1982). Bernardino et al. (2015) argue that institutions have both direct and indirect effects on the decision to become a social entrepreneur.

The entrepreneurial potential model was used as the basis of this study as prior research in South Africa focused on the theory of planned behaviour in order to explain the formation of (social) entrepreneurial intentions. The antecedents of entrepreneurial intention in this model are perceptions of feasibility and desirability. The hypothesised model was developed on the premise that the exogenous factors (regulatory, cognitive and normative environment) influenced SEI through the antecedents of feasibility and desirability.

The findings of this research did not support the hypothesised model. The normative and cognitive environments were found to have a negative relationship with the perceptions of feasibility and desirability, which was unanticipated and not readily interpretable. The regulatory environment however, showed a positive and significant relationship with antecedents of SEI.

Results from this study suggest that there is no significant relationship between the independent variable and the dependent variable, SEIs and its antecedents. Most surprising is that the findings indicated that there is no relationship between perceptions of feasibility and desirability, which contradicts with Shapero and Sokol's (1982) model of entrepreneurial intent, which recognises these attitudes as significant predictors of SEI.

The study by Shaw and Urban (2011) suggests that there is a positive although not significant relationship between the institutional environmental factors and SEIs. The results of this study support their findings; however, a significantly positive relationship between the regulatory environment and SEI, and perceptions of feasibility is evident.

6.3 Implications and recommendations

In light of the above, there is a great need to understand how context influences the formation of SEI in emerging and developing markets. There is a great need to change the attitudes and perceptions of tertiary level students to cultivate SEI in South Africa in an attempt to eradicate poverty and reduce inequality, among other social challenges that emerging and developing countries are still experiencing. The empirical evidence and the findings from this study have several implications on SE educators, policy makers and practitioners:

- Educational and training institutions are responsible for shaping the perceptions of SEI and aspirations of business students (Urban, 2013). The exposure to entrepreneurship for business students should improve SEI across educational institutions by enhancing entrepreneurial skills and abilities in order to improve the cognitive environment.

- The practical implications can be advanced to the curricular development at institutions by considering the antecedents of SE intentions in order to influence perceptions.

- The policy makers can focus on making entrepreneurship, particularly SE, an attractive career choice by promoting the field in order to enhance the societal norms. By improving the perceptions and norms towards entrepreneurship, students can have positive perceptions towards desirability and feasibility and ultimately SE.

6.4 Suggestions for future research

The results of this study indicate that a multi-disciplinary approach is critical in order to understand and explain the relationship of concepts and how SEIs are formed in emerging and developing contexts.

Based on the findings of this research, future research could focus on investigating the relationship between the cognitive and normative environment and SEI in order to isolate their influences.

Second, although empirical evidence suggests that intentions are an important predictor or indicator of the effort that individuals would make to engage in entrepreneurial behaviour, the findings of this research showed otherwise. Future research could focus on understanding the complex relationship between these attitudes and SEI.

Third, this research was cross-sectional in nature; a longitudinal approach could enhance the understanding of the development of SEI over time including the role played by context.

Finally, the study for SEI could be extended to include the motivational factors or antecedents such as self-efficacy, perceived behavioural control and empathy as per Mair and Noboa (2003) and the TPB in order to determine their influence of the institutional factors. Further research should combine both individual and situational factors in determining their influence towards the formation of SEI.

6.5 Conclusion

This research study was aimed at investigating the influence of context (institutional environment) on the formation of SEI and its antecedents. This chapter concludes this study by drawing back to the literature review and findings in order to draw practical and theoretical implications of the study. Further to that, it discussed recommendations and suggestions for future studies in light of the findings and limitations of this research.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), pp. 179–211.

Andrews, D., Nonnecke, B. & Preece, J. (2003). Electronic survey methodology: A case study in reaching hard-to-involve Internet users. *International Journal of Human-Computer Interaction*, 16(2), pp. 185–210.

Arasti, Z., Pasvishe, F.A. & Motavaseli, M. (2012). Normative Institutional Factors Affecting Entrepreneurial Intention in Iranian Information Technology Sector. *Journal of Management and Strategy*, 3(2), pp. 56–82.

Ariff, A.H.M., Bidin, Z., Sharif, Z. & Ahmad, A. (2010). Predicting entrepreneurship intention among Malay University Accounting students in Malaysia. *Unitar E-Journal*, 6(1), pp. 1-10.

ASEN. (2015). *ASEN : What is SE*. Available from ASENETWORK WEB: http://asenetwork.org/about/what-is-se/ (Accessed 17 April 2015).

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

Ayob, N., Yap, C.S., Rashid, A., Sapuan, D.A. & Zabid, M. (2013). Social Entrepreneurial Intention among Business Undergraduates: An Emerging Economy Perspective. *Gadjah Mada International Journal Of Business*, 153(15), pp. 249–267.

Babbie, E. & Mouton, J. (2009). *The practice of social research*. Cape Town: Oxford University Press Southern Africa (Pty) Ltd.

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

Bernardino, S., Santos, J.F. & Ribeiro, J.C. (2015). *Social entrepreneurship: Does institutional environment make a difference?* Paper presented at 55th Congress of the European Regional Science Association. Lisbon, Portugal.

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

Blaxter, L, (2003) *How to Research,* (5th ed.). Buckingham, Open University Press.

Bosma, N. & Levie, J. (2009). Global Entrepreneurship Monitor. *Global Report. Babson:* MA: Babson College.

Bosma, N., Wennekers, S. & Amorós, J.E. (2012). *Global entrepreneurship monitor 2011 extended report: Entrepreneurs and entrepreneurial employees across the globe*. London: London Business School, Global Entrepreneurship Research Association.

Bowen, H.P. & De Clercq, D. (2008). Institutional context and the allocation of entrepreneurial effort. *Journal of International Business Studies*, 39(4), pp. 747-768.

Boyd, N.G. & Vozikis, G.S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship theory and practice*, 18(1), pp. 63-63.

Busenitz, L.W., Gomez, C. & Spencer, J.W. (2000). Country Institutional Profiles: Unlocking Entrepreneurial Phenomena. *Academy of Management Journal*, 43(5), pp. 994–1003.

Cohen, J.W. (1988). *Statistical power analysis for the behavioural sciences,* (2nd ed.). New York: Erlbaum.

Cooper, D. R. & Schindler, P. S. (2014). *Business Research methods .* New York: McGraw-Hill.

Dacin, M.T., Dacin, P.A. & Tracey, P. (2011). Social entrepreneurship: A critique and future directions. *Organization Science*, 22(5), pp. 1203–1213.

Dees, J.G. & Economy, P. (2001). *Social entrepreneurship. Enterprising Non-profits: A Toolkit for Social Entrepreneurs*. New York: John Wiley & Sons.

Defourny, J. & Nyssens, M., (2008). Social enterprise in Europe: recent trends and developments. *Social Enterprise Journal*, 4(3), pp. 202–228.

Dennick, M.T. (2011). Making Sense of Cronbach's alpha. *International journal of Medical Education*, 2, pp. 53-55.

Dey, P., (2006). The rhetoric of social entrepreneurship: Parology and new language games in academic discourse. In C. Steyaert and D. Hjorth (Eds.), Entrepreneurship as Social Change, (pp. 121-141). Cheltenham: Edward Elgar.

Díaz-Casero, J.C., Ferreira, J.J.M., Mogollón, R.H. & Raposo, M.L.B. (2012). Influence of institutional environment on entrepreneurial intention: a comparative study of two countries university students*. International Entrepreneurship and Management Journal*, 8(1), pp. 55-74.

Dissanayake, D. M. N. S. W. (2013). The impact of perceived desirability and perceived feasibility on entrepreneurial intention among undergraduate students in Sri Lanka: An extended model. The Kelaniya Journal of Management, 2(1), pp. 39-57.

Drayton, B. (2012). Foreword. In D. Kaufman, (Ed.), *Social Entrepreneurship in the Age of Atrocities*. Cheltenham: Edward Elgar Publishing.

Estrin, S., Mickiewicz, T. & Stephan, U. (2013). Entrepreneurship, Social Capital, and Institutions: Social and Commercial Entrepreneurship Across Nations. *Entrepreneurship Theory and Practice*, 37(3), pp. 479–504.

Ferri, E. & Urbano, D. (2015). Exploring How Institutions Influence Social and Commercial Entrepreneurship: In L.M.C. Farinha, J.J.M. Ferreira, H.L. Smith & S Bagchi-Sen, *Handbook of Research on Global Competitive*

Advantage through Innovation and Entrepreneurship, (pp. 454–468). Hershley, PA: IGI Global.

Gaffurini, E. & Urban, B. (2015). *Organisational learning capability and social innovation: a study of hybrid social enterprises in South Africa*. (Doctoral Thesis). Faculty of Commerce, Law and Management, University of the Witwatersrand, Johannesburg.

Gartner, W.B. (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of management review*, 10(4), pp. 696-706.

Goethner, M., Obschonka, M., Silbereisen, R.K. & Cantner, U. (2009). *Approaching the agora: Determinants of scientists' intentions to pursue academic entrepreneurship*. Jena economic research papers. Max-Planck-Institut fur Okonomik und Universitat Jena.

Griffiths, M.D., Gundry, L.K. & Kickul, J.R. (2013). The social political, economic and cultural determinants of social entrepreneurship activity. *Journal of Small Business and Enterprise Development*, 20(2), pp. 341-357.

Guerrero, M., Rialp, J. & Urbano, D. (2008). The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model. *International Entrepreneurship and Management Journal*, 4(1), pp. 35-50.

Harding, R. (2007). Understanding social entrepreneurship. *Industry and Higher Education*, 21(1), pp. 73-84.

Harding, R. & Cowling, M. (2006). Points of view assessing the scale of the equity gap. *Journal of Small Business and Enterprise Development*, 13(1), pp. 115–132.

Herrington, M. & Kew, J. (2014). *Global Entrepreneurship Monitor: South African Report. Twenty Years democracy*. Centre for innovation and entrepreneurship: University of Cape Town

Herrington, M., Kew, J. & Kew, P. (2009). *Global entrepreneurship monitor*. Cape Town: Centre for innovation and entrepreneurship, University of Cape Town.

Iakovleva, T., Kolvereid, L. & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education and Training*, 53(5), pp. 353–370.

Karanda, C. & Toledano, N., (2012). Social entrepreneurship in South Africa: a different narrative for a different context. *Social Enterprise Journal*. 8(3), pp. 201-215.

Karimi, S., Biemans, H.J.A., Naderi Mahdei, K., Lans, T., Chizari, M. & Mulder, M. (2015). Testing the relationship between personality characteristics, contextual factors and entrepreneurial intentions in a developing country. *International Journal of Psychology,* 51(2), pp. 1-14

Kerlin, J.A. (2008). *A Comparative Analysis of the Global Emergence of Social Enterprise*. Paper presented at the 8th ISTR Conference & 2nd EMES-ISTR Conference, Barcelona.

Ketchen, D. & Bergh, D.D. (2009). Research methods in strategic management: Past accomplishments and future challenges. *Organizational Research Methods*, 11, pp. 643-658.

Kim, M.S. & Hunter, J.E. (1993). Attitude-Behavior Relations: A Meta-Analysis of Attitudinal Relevance and Topic. *Journal of Communication*, 43(1), pp. 101–142.

Kostova, T. (1997). Country institutional profiles: Concept and measurement. *Academy of Management Proceedings*, 1997(1), pp. 180–184.

Krauss, S.E. (2005). Research Paradigms and meaning making: A primer. *The qualitative report,* (10)4, pp. 758-770.

Krueger, N.F. (1993). The Impact of Prior Entrepreneurial Exposure on Perceptions of New Venture Feasibility and Desirability. *Entrepreneurship Theory and Practice,* 18(1), pp. 5-21.

Krueger, N. & Brazeal, D.V. (1994). Entrepreneurial Potential and Potential Entrepreneurs. *Entrepreneurship Theory and Practice*, 18(3), pp. 91-104.

Kunday, Ö. & Çakir, C. (2014). The Moderating Role of Entrepreneurship Education and Family Tradition on the Relationship between Self-Esteem and Entrepreneurial Intention. *International Journal of Humanities and Social Science*, 9(1), pp. 25-35

Leadbeater, C. (1997). *The rise of the social entrepreneur*. London: Demos.

Lee, G.J. (2015). *Business Statistics Made easy in SAS*. Randjiesfontein: Silk Route Press.

Lekhanya, L.M. (2015). The role of universities in promoting entrepreneurship in South Africa. *Journal of Governance and Regulation*, *4*(3), pp. 67–71.

Leroy, H., Maes, J., Sels, L. & Debrulle, J. (2009). *Gender effects on entrepreneurial intentions: A Tab Multi Group Analysis at factor and indicator level:* Paper presented at the Academy of Management Annual Meeting, Chicago.

Liñán, F. & Chen, Y. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 3(3), pp. 593–617.

Linan, F. (2008). Skill and value perceptions: how do they affect entrepreneurial intentions?. *International Entrepreneurship and Management Journal*, 4(3), pp. 257-272.

Liñán, F., Rodriguez-Cohard, J.C. & Rueda-Cantuche, J.M. (2005). *Factors affecting entrepreneurial intention levels*. Paper presented at the 45th Congress of the European Regional Science Association, Amsterdam.

Liñán, F., Santos, F.J. & Fernandez, J. (2011). The influence of perceptions on potential entrepreneurs. *International Entrepreneurship and Management* Journal, 7(3), pp. 373-390.

Liñán, F., Urbano, D. & Guerrero, M. (2011). Regional variations in entrepreneurial cognitions: start-up intentions of university students in Spain. *Entrepreneurship & Regional Development*, 23(3-4), pp. 187-215.

Littlewood, D. & Holt, D. (2013). *Social enterprise in South Africa*. ICSEM Working Papers, 02. Liege: The International Comparative Social Enterprise Models (ICSEM) Project.

Littlewood, D. & Holt, D. (2015). Social entrepreneurship in South Africa: Exploring the influence of environment. *Business & Society*, 12(4), pp. 21-48.

Mair, J. & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of world business*, 41(1), pp. 36–44.

Mair, J. & Marti, I. (2009). Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of business venturing*, 24(5), pp. 419-435.

Mair, J. & Noboa, E., (2003). *Social entrepreneurship: how intentions to create a social enterprise are formed*. Working paper No 521. Universidad de Navarra, Barcelona: IESE Business School.

Malebana, M.J. & Swanepoel, E., (2015). Graduate entrepreneurial intentions in the rural provinces of South Africa. *Southern African Business Review,* 19(1), pp. 89-111

Manolova, T.S., Eunni, R.V. & Gyoshev, B.S. (2007). Institutional environments for entrepreneurship: Evidence from emerging economies in Eastern Europe. *Entrepreneurship Theory and Practice*, *32*(1), pp. 203–218.

Masendeke, A. & Mugova, A. (2009). Zimbabwe and Zambia. In J.A. Kerlin, (Ed.), *Social Enterprise: A Global Comparison*, (pp. 114-138). Lebanon, University Press of New England.

McClelland, D.C. (1961). *The achievement society*. Princeton, NJ: Von Nostrand.

Mitchell, R.K., Busenitz, L., Lant, T., McDougall, P.P., Morse, E.A. & Smith, J.B. (2002). Toward a theory of entrepreneurial cognition: Rethinking the people side of entrepreneurship research. *Entrepreneurship theory and practice*, 27(2), pp. 93-104.

Nicholls, A. (Ed.). (2006). *Social entrepreneurship: New models of sustainable social change*. Oxford: Oxford University Press.

North, D. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.

Ntayi, M.J., Mutebi, H., Kamanyi, S. & Byangwa, K. (2013). Institutional framing for entrepreneurship in sub-Saharan Africa: a case of Uganda. *World*

Journal of Entrepreneurship, Management and Sustainable Development, 9(2/3), pp. 133-154.

Olsen, J.P. & March, J.G. (1989). *Rediscovering institutions: the organizational basis of politics*. New York: Free Press.

Patton, M.Q. & Cochran, M. (2002*). A Guide to Using Qualitative Research Methodology*. Available from http://fieldresearch.msf.org/msf/bitstream/10144/84230/1/Qualitative%20research%20 methodology.pdf (accessed 17 October 2015).

Pihie, L., Akmaliah, L.P.Z. & Hisyamuddin, H. (2009). Choice of self-employment intentions among secondary school students. *Journal of International Social Research*, 2(9), pp. 539-549.

Rivera-Santos, M., Holt, D., Littlewood, D. & Kolk, A. (2015). Social entrepreneurship in sub-Saharan Africa. *The Academy of Management Perspectives, 29*(1), pp. 72-91.

Roberts, D. & Woods, C., (2005). Changing the world on a shoestring: the concept of social entrepreneurship. *University of Auckland Business Review,* 7(1), pp. 45–51.

RSA (Republic of South Africa). (1997). *Non-profit Organisations Act, No 71 of 1997*. Pretoria: Government Printers.

RSA (Republic of South Africa). (2003). *B-BBEE Act No 53 of 2003*. Pretoria: Government Printers.

RSA (Republic of South Africa). (2011). *Companies Amendment Act No 3 of 2011*. Pretoria: Government Printers.

Ruef, M. & Scott, W.R. (1998). A multidimensional model of organizational legitimacy: Hospital survival in changing institutional environments. *Administrative science quarterly*, 43(4), pp. 877-904.

Rwigema, H., Urban, B. & Venter, R. (2010). *Entrepreneurship: Theory in Practice,* (2nd ed.). Cape Town: Oxford University Press.

Scherer, R.F., Adams, J.S., Carley, S. & Wiebe, F.A. (1989). Role model performance effects on development of entrepreneurial career preference. *Entrepreneurship Theory and Practice*, 13(3), pp. 53-71.

Schlaegel, C. & Koenig, M. (2014). Determinants of entrepreneurial intent: a meta-analytic test and integration of competing models. *Entrepreneurship Theory and Practice*, 38(2), pp. 291-332.

Scott, C. (2001). Analysing regulatory space: fragmented resources and institutional design. *Public Law*, (2001), pp. 283-305.

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

Seelos, C., Mair, J., Battilana, J. & Tina Dacin, M. (2011). The Embeddedness of Social Entrepreneurship: Understanding Variation across Local Communities. *Research in the Sociology of Organizations,* 33, pp. 333–363.

Shane, S. (2004). *Academic Entrepreneurship: University Spinoffs and Wealth Creation (New Horizons in Entrepreneurship Series)*. Cheltenham, UK: Edward Elgar Publishing.

Shapero, A. & Sokol, L. (1982). Social Dimensions of Entrepreneurship. In C.A. Kent, D.L. Sexton, & K.H. Vesper. (Eds.), *Encyclopaedia of Entrepreneurship*, (pp. 72-90). Englewood Cliffs, NJ, Prentice Hall.

Shaw, G. & Urban, B. (2011). *The influence of the institutional environment on entrepreneurial intentions in an emerging economy*. Paper presented at ICSB World Conference Proceedings, International Council for Small business (ICSB), Washington.

Sine, W.D. & David, R.J. (2010). *Institutions and entrepreneurship*. West Yorkshire, England: Emerald Group Publishing Limited.

Sivarajah, K. & Achchuthan, S. (2013). Entrepreneurial intention among undergraduates: Review of literature. *European Journal of Business and Management*, 5(5), pp. 172-186.

Spencer, J.W. & Gómez, C. (2004). The relationship among national institutional structures, economic factors, and domestic entrepreneurial activity: a multi-country study. *Journal of Business Research*, 57(10), pp. 1098-1107.

Stangor, C. (2011). *Research methods for the behavioral sciences*, (4th ed.). California: Wadsworth.

Steinman, S. & van Rooij, J. (2012). Developing public policies for the social and solidarity economy in South Africa: The need for a state-civil society dialogue. *Universitas Forum*, 3(2), pp. 1-19.

Stephan, U., Uhlaner, L.M. & Stride, C. (2014). Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies*, 46(3), pp. 308-331.

Suatet, F. (2005). *The role of institutions in entrepreneurship: Implications for policy development*. Fairfax, VA: Mercantus Center, George Mason University.

Terjesen, S., Lepoutre, J., Justo, R. & Bosma, N. (2012). *Global entrepreneurship monitor: 2009 report on social entrepreneurship*. Santiago: Babson Park, London: Babson College, Universidad del Desarrollo, Global Entrepreneurship Research Association.

Thompson, J., Alvy, G. & Lees, A. (2000). Social entrepreneurship-a new look at the people and the potential. *Management decisions*, 38(5), pp. 328-338.

Thoumrungroje, A. (2010). Institutional drivers of entrepreneurial intentions in an emerging economy: an empirical investigation in Thailand. *Journal of International Business and Economics*, 10(2), pp. 1-7.

Thrikawala, S. (2011). The determinants of entrepreneurial intention among academics in Sri Lanka. *International Proceedings of Economics Development & Research*, 4, pp. 454-468.

Turton, N. & Herrington, M. (2013). *Global Entrepreneurship Monitor 2012 Report South Africa*. Cape Town: Graduate School of Business, University of Cape Town.

Tustin, D., Ligthelm, A., Martins, D. & Van Wyk, J. (2005). *Marketing Research in Practise*. Pretoria: UNISA University Press.

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

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

Urban, B. & Teise, H. (2015). Antecedents to social entrepreneurship intentions: an empirical study in South Africa. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, 24(2), pp. 36-52.

Urban, B., Van Vuuren, J.J. & Owen, R.H. (2008). Antecedents to entrepreneurial intentions: Testing for measurement invariance for cultural values, attitudes and self-efficacy beliefs across ethnic groups. *SA Journal of Human Resource Management*, 6(1), pp. 1-9.

Urbano, D., Toledano, N. & Soriano, D.R. (2010). Analyzing Social Entrepreneurship from an Institutional Perspective: Evidence from Spain. *Journal of Social Entrepreneurship,* 1(1), pp. 54-69.

Valdez, M.E. & Richardson, J. (2013). Institutional determinants of Macro-Level entrepreneurship. *Entrepreneurship Theory and Practice*, 37(5), pp. 1149–1175.

Vidal-Suñé, A. & López-Panisello, M.B. (2013). Institutional and economic determinants of the perception of opportunities and entrepreneurial intention/Determinantes institucionales y económicos de la percepción de oportunidades y de la intención emprendedora. *Investigaciones Regionales*, 26, pp. 75-96.

Viviers, S., Venter, G. & Solomon, G. (2012). South African university students' intentions to establish social enterprises, *The Southern African Journal of Entrepreneurship and Small Business Management,* 5(3), pp. 28-45.

Volkmann, C.K., Tokarski, K.O. & Ernst, K. (2012). Background, Characteristics and Context of social entrepreneurship. In C.K. Volkmann, K.O. Tokarski & K. Ernst (Eds.), *Social Entrepreneurship and Social Business.* (pp. 3-30).Berlin: Gabler Verlag.

Wang, W., Lu, W. & Millington, J.K. (2011). Determinants of entrepreneurial intention among college students in China and USA. *Journal of Global Entrepreneurship Research*, 1(1), pp. 35-44.

Weerakoon, W.M.P.G.C. & Gunatissa, H.H.A.J. (2014). Antecedents of Entrepreneurial Intention (With Reference to Undergraduates of UWU, Sri Lanka). *International Journal of Scientific and Research Publications*, 4(11), pp. 1-6.

Welter, F. & Smallbone, D. (2009). Institutional perspectives on entrepreneurial behavior in challenging environments. *Journal of Small Business Management*, 49(1), pp. 107-125.

World Bank. (2014). *Annual report 2014*. Washington DC: The World Bank Group.

Wu, S. & Wu, L., (2008). The impact of higher education on entrepreneurial intentions of university students in China. *Journal of Small Business and Enterprise Development*, 15(4), pp. 752–774.

Xheneti, M. & Bartlett, W. (2012). Institutional constraints and SME growth in post-communist Albania. *Journal of Small Business and Enterprise Development*, 19(4), pp. 607–626.

Yin, R.K. (1994). Discovering the future of the case study method in evaluation research. *Evaluation Practice*, *15*(3), pp. 283–290.

Yin, R.K. (2013). *Case study research: Design and methods*. New York: Sage Publications.

Yun, G.W. & Trumbo, C.W. (2000). *Comparative response to a survey executed by post, e-mail, & web form*. Available from http://onlinelibrary.wiley.com/enhanced/doi/10.1111/j.1083-6101.2000.tb00112.x (Accessed 15 July 2015).

Zahra, S.A. (2008). The virtuous cycle of discovery and creation of entrepreneurial opportunities. *Strategic Entrepreneurship Journal*, 2(3), pp. 243-257.

APPENDIX A

Research Instrument

The Graduate School of Business Administration
2 St David's Place, Parktown
Johannesburg, 2193
South Africa
PO Box 98, WITS, 2050
Website: www.wbs.ac.za

MM RESEARCH CONSENT FORM
Masters in Entrepreneurship and Venture Creation
Social entrepreneurial intention formation among university students

INFORMATION SHEET AND CONSENT FORM

Hello, I am Leann Kujinga. I am conducting research for the purpose of completing my Masters in Entrepreneurship and Venture Creation at Wits Business School.

What I am doing

I am conducting research on the influence of the institutional environment on the formation of SEI among business students in South Africa.

Your participation

I hereby request that you complete a survey of about 25 questions, which will take approximately 10 minutes to complete.

Please understand that **your participation is voluntary and confidential** and you are not being forced to take part in this study.

Risks/discomforts

At the present time, I do not see any risks in your participation. The risks associated with participation in this study are no greater than those encountered in daily life.

Benefits

There are no immediate benefits to you from participating in this study. If you would like to receive feedback on the study, I can send you the results of the study when it is completed sometime after July 2016.

Who to contact if you have been harmed or have any concerns

This research has been approved by the Wits Business School. If you have any complaints about ethical aspects of the research or feel that you have been harmed in any way by participating in this study, please contact the Research Office Manager at the Wits Business School, Mmabatho Leeuw. Mmabatho.leeuw@wits.ac.za

CONSENT

I hereby agree to participate in research on the assessment of the influence of institutional factors on the formation of SEI among university students

I understand that this is a research project whose purpose is not necessarily to benefit me personally in the immediate or short term.

I understand that my participation will remain confidential.

……..

Signature of participant **Date**:

SECTION A

The following questions will help me to find out more about you as a respondent to this questionnaire. Where relevant place a tick in the block that best corresponds to your answer.

1.1 Please state your age in years _____

1.2 Please indicate your gender:

- ❍ Male
- ❍ Female

1.3 Ethnic group

- ❍ Indian
- ❍ Coloured
- ❍ White
- ❍ Chinese
- ❍ African
- ❍ Other, Specify _____

1.4 Indicate which tertiary level you are enrolled for:

- ❍ Short program
- ❍ Diploma
- ❍ Degree
- ❍ Post graduate diploma
- ❍ Postgraduate degree

1.5 Please indicate which faculty you belong to

Commerce, Law and Management	
Sciences	
Humanities	
Engineering and built environment	
Health Sciences	

1.6 Select the option that best suits your current work situation (only one):

Private company	
Public sector	
NGO or association	
Independent worker	
Entrepreneur with partners	
Student	

1.7 Are any of your close family members, or have they been, an entrepreneur or business-owners (parents, siblings, grandparents, uncles and aunts or cousins)

- ❍ If yes, what kind of business? _____
- ❍ No

Section B

2. The following questions will help me to find out more about your perceptions towards the regulatory, cognitive and normative environment in South Africa. **Indicate how much you agree or disagree with a statement by placing an X in the appropriate box.**

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Government organizations assist individuals in starting their own businesses (1)					
Government sets aside government contracts for new and small businesses. (2)					
Local and national government have support for individuals starting a new business. (3)					
Government sponsors organizations that help new businesses develop (4)					
Even after failing, government assists entrepreneurs starting again. (5)					
Turning new ideas into businesses is admired in this country (6)					
In this country, innovative and creative thinking is viewed as a route to success. (7)					
Entrepreneurs are admired in this country (8)					
People in this country greatly admire those who start own businesses (9)					
Individuals know how to protect a new business legally. (10)					
Those who start new businesses know how to deal with risk. (11)					
Those who start new businesses know how to manage risk (12)					
Most people know where to find info about markets for their products. (13)					

Section C

3.1 Have you ever been involved in a social enterprise/ initiatives / programs?

❍ Yes (1)

❍ No (2)

3.2 Please place an X on the answer that best represents your response. If you actually started your own social business, how would you feel?

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I would love it					
I would be tense					
I would be enthusiastic					

3.3 Please **place an X** on the answer that best represents your response.

If you actually started your own social business, how would you feel?

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
It would be very easy					
I would be certain of success					
I would not be overworked					
I know enough to start a social business					
I am sure of myself					

3.4 The following questions will help me to find out more about you and your inclination to start a social entrepreneurial venture. Indicate how much you agree or disagree with a statement by **placing an X** in the block corresponding to your answer.

	Strongly agree (1)	Agree (2)	Neutral	Disagree	Strongly disagree
I am ready to do anything to be an social entrepreneur (1)					
My professional goal is to be an social entrepreneur (2)					
I will make every effort to start and run my own social enterprise (3)					
I am determined to create a social entrepreneurial venture in the future (4)					
I do not have doubts about ever starting my own social enterprise in the future (5)					
I have very seriously thought of starting a social enterprise in the future (6)					
I have a strong intention to start a social enterprise in the future (7)					
My qualification has contributed positively towards my interest in starting a social enterprise (8)					
I had a strong intention to start my own social enterprise before I started with my qualification (9)					

Thank you for your participation.

APPENDIX B

Consistency matrix

Research problem stated here					
Sub-problem	**Literature Review**	**Hypotheses or Propositions or Research questions**	**Source of data**	**Type of data**	**Analysis**
To identify the relationship between the institutional environment and SEI	Shaw and Urban (2011) Mair & Noboa (2003)	H1: H^1: An individual's perception of the regulatory environment influences SEI through a) perception of feasibility b) perception of desirability H^2: An individual's perception of the normative environment influences and SEI through a) perception of feasibility b) perception of desirability H^3: An individual's perception of the cognitive environment influences SEI through a) perception of feasibility b) perception of desirability	Structured survey questionnaire See Appendix A	Ordinal	Linear multiple regression
To investigate the relationship between the institutional environment and perceptions of desirability nd feasibility	Mehrabian & Epstein Mair & Noboa (2003)	H^1: An individual's perception of the regulatory environment influences SEI through a) perception of feasibility b) perception of desirability H^2: An individual's perception of the normative environment influences and SEI through a) perception of feasibility b) perception of desirability H^3: An individual's perception of the cognitive environment influences SEI through a) perception of feasibility b) perception of desirability	Structured survey questionnaire See Appendix A	Ordinal	Linear multiple regression

Research problem stated here					
Sub-problem	**Literature Review**	**Hypotheses or Propositions or Research questions**	**Source of data**	**Type of data**	**Analysis**
To investigate the relationship between perceptions of feasibility and desirability with SEI	Ayob et al. (2013) Krueger, NF (1993)	H3: A positive relationship exists between perceived feasibility and SEI H5: A positive relationship exists between perceptions of desirability and SEI	Structured survey questionnaire See Appendix A	Ordinal	Linear Multiple regression

APPENDIX C

Sample Demographics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Age	128	18	49	25.13	5.494
Valid N (listwise)	128				

Age Group					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 24 years	71	55.5	55.5	55.5
	25 years and above	57	44.5	44.5	100.0
	Total	128	100.0	100.0	

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	30 years and below	114	89.1	89.1	89.1
	Above 30 years	14	10.9	10.9	100.0
	Total	128	100.0	100.0	

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	71	55.5	55.5	55.5
	Female	57	44.5	44.5	100.0
	Total	128	100.0	100.0	

Ethnic group					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Indian	24	18.8	18.8	18.8
	Coloured	1	.8	.8	19.5
	White	6	4.7	4.7	24.2
	Chinese	3	2.3	2.3	26.6
	Other, Specify	11	8.6	8.6	35.2
	African	83	64.8	64.8	100.0
	Total	128	100.0	100.0	

Indicate which tertiary level you are enrolled for:					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Post graduate diploma	16	12.5	12.5	12.5
	Diploma	8	6.3	6.3	18.8
	Degree	55	43.0	43.0	61.7
	Postgraduate degree	49	38.3	38.3	100.0
	Total	128	100.0	100.0	

Please indicate which faculty you belong to					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Commerce, Law and Management	87	68.0	68.0	68.0
	Sciences	13	10.2	10.2	78.1
	Humanities	7	5.5	5.5	83.6
	Engineering and built environment	18	14.1	14.1	97.7
	Health Sciences	3	2.3	2.3	100.0
	Total	128	100.0	100.0	

Select the option that best suits your current work situation (only one):					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	71	55.5	55.5	55.5
	Private company	31	24.2	24.2	79.7
	Public sector	9	7.0	7.0	86.7
	NGO or association	6	4.7	4.7	91.4
	Independent worker	2	1.6	1.6	93.0
	Entrepreneur with partners	9	7.0	7.0	100.0
	Total	128	100.0	100.0	

Are any of your close family members, or have they been, an entrepreneur or business-owners?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	69	53.9	53.9	53.9
	No	59	46.1	46.1	100.0
	Total	128	100.0	100.0	

APPENDIX D

Factor Analysis for all the attributes

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.789
Bartlett's Test of Sphericity	Approx. Chi-Square	2194.133
	Df	406
	Sig.	.000

Communalities		
	Initial	**Extraction**
Regulatory Environment: Government organizations assist individuals in starting their own businesses	1.000	.722
Regulatory Environment: Government sets aside government contracts for new and small businesses.	1.000	.619
Regulatory Environment: Local and national government have support for individuals starting a new business.	1.000	.704
Regulatory Environment: Government sponsors organizations that help new businesses develop	1.000	.704
Regulatory Environment: Even after failing, government assists entrepreneurs starting again.	1.000	.686
Normative Environment: Turning new ideas into businesses is admired in this country	1.000	.625
Normative Environment: In this country, innovative and creative thinking is viewed as a route to success.	1.000	.688
Normative Environment: Entrepreneurs are admired in this country	1.000	.622
Normative Environment: People in this country greatly admire those who start own businesses	1.000	.647
Cognitive Environment: Individuals know how to protect a new business legally.	1.000	.681
Cognitive Environment: Those who start new businesses know how to deal with risk.	1.000	.738
Cognitive Environment: Those who start new businesses know how to manage risk	1.000	.733
Cognitive Environment: Most people know where to find info about markets for their products.	1.000	.639
Desirability: I would love it	1.000	.836

Communalities		
	Initial	**Extraction**
Desirability: I would be enthusiastic	1.000	.737
Feasibility: It would be very easy	1.000	.721
Feasibility: I would be certain of success	1.000	.570
Feasibility: I would not be overworked	1.000	.507
Feasibility: I know enough to start a social business	1.000	.642
Feasibility: I am sure of myself	1.000	.571
Social entrepreneurial intentions: I am ready to do anything to be an social entrepreneur	1.000	.540
Social entrepreneurial intentions: My professional goal is to be an social entrepreneur	1.000	.742
Social entrepreneurial intentions: I will make every effort to start and run my own social enterprise	1.000	.731
Social entrepreneurial intentions: I am determined to create a social entrepreneurial venture in the future	1.000	.851
Social entrepreneurial intentions: I do not have doubts about ever starting my own social enterprise in the future	1.000	.705
Social entrepreneurial intentions: I have very seriously thought of starting a social enterprise in the future	1.000	.787
Social entrepreneurial intentions: I have a strong intention to start a social enterprise in the future	1.000	.775
Social entrepreneurial intentions: My qualification has contributed positively towards my interest in starting a social enterprise	1.000	.585
Social entrepreneurial intentions: I had a strong intention to start my own social enterprise before I started with my qualification	1.000	.533
Extraction Method: Principal Component Analysis.		

APPENDIX E

Extraction Method: Principal Component Analysis.

Rotated Component Matrix[a]						
	Component					
	1	2	3	4	5	6
Social entrepreneurial intentions: I am determined to create a social entrepreneurial venture in the future	.899	-.013	-.125	.145	.072	.003
Social entrepreneurial intentions: I have very seriously thought of starting a social enterprise in the future	.872	.021	-.117	-.027	.107	.012
Social entrepreneurial intentions: I have a strong intention to start a social enterprise in the future	.856	-.006	-.154	.071	.101	.055
Social entrepreneurial intentions: My professional goal is to be an social entrepreneur	.849	.088	.055	-.046	-.086	-.008
Social entrepreneurial intentions: I will make every effort to start and run my own social enterprise	.843	.098	.027	.070	-.045	-.049
Social entrepreneurial intentions: I do not have doubts about ever starting my own social enterprise in the future	.827	.039	-.100	-.001	.069	.076
Social entrepreneurial intentions: My qualification has contributed positively towards my interest in starting a social enterprise	.756	.061	-.018	-.055	.080	.005
Social entrepreneurial intentions: I am ready to do anything to be an social entrepreneur	.686	.013	.177	-.023	-.192	-.032
Social entrepreneurial intentions: I had a strong intention to start my own social enterprise before I started with my qualification	.642	.159	.078	-.054	-.254	.149
Regulatory Environment: Government organizations assist individuals in starting their own businesses	.081	.831	.028	.068	.006	.142
Regulatory Environment: Government sponsors organizations that help new businesses develop	.086	.782	.119	.237	.040	.112
Regulatory Environment: Local and national government have support for individuals starting a new business.	.009	.765	.134	.190	.248	.052

Rotated Component Matrix[a]						
	Component					
	1	2	3	4	5	6
Regulatory Environment: Government sets aside government contracts for new and small businesses.	.064	.765	.000	.031	-.093	.142
Regulatory Environment: Even after failing, government assists entrepreneurs starting again.	.194	.644	.342	.296	-.168	.023
Cognitive Environment: Those who start new businesses know how to manage risk	.009	.123	.845	.048	-.020	.033
Cognitive Environment: Those who start new businesses know how to deal with risk.	-.046	.040	.845	.105	-.066	.069
Cognitive Environment: Most people know where to find info about markets for their products.	-.079	.081	.784	.070	.041	-.073
Cognitive Environment: Individuals know how to protect a new business legally.	-.042	.145	.723	.298	-.042	.213
Normative Environment: In this country, innovative and creative thinking is viewed as a route to success.	.006	.147	.171	.790	.038	-.104
Normative Environment: People in this country greatly admire those who start own businesses	-.015	.027	.105	.785	.084	.108
Normative Environment: Entrepreneurs are admired in this country	-.014	.166	.136	.758	-.035	.004
Normative Environment: Turning new ideas into businesses is admired in this country	.058	.244	.016	.739	-.025	.124
Desirability: I would love it	.015	.007	-.045	-.021	.913	.012
Desirability: I would be enthusiastic	-.048	.014	-.065	.006	.854	.028
Feasibility: I am sure of myself	.014	.010	-.029	.130	.549	.501
Feasibility: It would be very easy	.073	.081	-.020	-.068	-.027	.839
Feasibility: I know enough to start a social business	.076	.110	.030	.095	.198	.758
Feasibility: I would not be overworked	-.042	.288	.108	.081	-.133	.622
Feasibility: I would be certain of success	.000	.044	.191	.009	.482	.547

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

APPENDIX F

Individual Construct EFA

F1: Regulatory environment validity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.846
Bartlett's Test of Sphericity	Approx. Chi-Square	264.659
	df	10
	Sig.	.000

Communalities		
	Initial	**Extraction**
Regulatory Environment: Government organizations assist individuals in starting their own businesses	1.000	.697
Regulatory Environment: Government sets aside government contracts for new and small businesses.	1.000	.557
Regulatory Environment: Local and national government have support for individuals starting a new business.	1.000	.632
Regulatory Environment: Government sponsors organizations that help new businesses develop	1.000	.713
Regulatory Environment: Even after failing, government assists entrepreneurs starting again.	1.000	.594

Extraction Method: Principal Component Analysis.

Total Variance Explained						
Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	3.193	63.853	63.853	3.193	63.853	63.853
2	.590	11.806	75.660			
3	.500	9.991	85.650			
4	.403	8.055	93.705			
5	.315	6.295	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]	
	Component 1
Regulatory Environment: Government organizations assist individuals in starting their own businesses	.835
Regulatory Environment: Government sets aside government contracts for new and small businesses.	.746
Regulatory Environment: Local and national government have support for individuals starting a new business.	.795
Regulatory Environment: Government sponsors organizations that help new businesses develop	.844
Regulatory Environment: Even after failing, government assists entrepreneurs starting again.	.770
Extraction Method: Principal Component Analysis.	

a. 1 components extracted.

F2: Regulatory environment reliability

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.857	.858	5

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.547	.432	.609	.177	1.408	.004	5

F3: Normative environment validity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.783
Bartlett's Test of Sphericity	Approx. Chi-Square	155.041
	df	6
	Sig.	.000

Communalities		
	Initial	**Extraction**
Normative Environment: Turning new ideas into businesses is admired in this country	1.000	.570
Normative Environment: In this country, innovative and creative thinking is viewed as a route to success.	1.000	.666
Normative Environment: Entrepreneurs are admired in this country	1.000	.650
Normative Environment: People in this country greatly admire those who start own businesses	1.000	.640

Extraction Method: Principal Component Analysis.

Total Variance Explained						
Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	2.526	63.150	63.150	2.526	63.150	63.150
2	.586	14.657	77.807			
3	.489	12.214	90.020			
4	.399	9.980	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]	
	Component 1
Normative Environment: Turning new ideas into businesses is admired in this country	.755
Normative Environment: In this country, innovative and creative thinking is viewed as a route to success.	.816
Normative Environment: Entrepreneurs are admired in this country	.806
Normative Environment: People in this country greatly admire those who start own businesses	.800

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

F4: Normative environment reliability

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.801	.805	4

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.508	.423	.570	.147	1.348	.002	4

F5: Cognitive environment validity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.793
Bartlett's Test of Sphericity	Approx. Chi-Square	210.069
	df	6
	Sig.	.000

Communalities		
	Initial	Extraction
Cognitive Environment: Individuals know how to protect a new business legally.	1.000	.643
Cognitive Environment: Those who start new businesses know how to deal with risk.	1.000	.739
Cognitive Environment: Those who start new businesses know how to manage risk	1.000	.749
Cognitive Environment: Most people know where to find info about markets for their products.	1.000	.600

Extraction Method: Principal Component Analysis.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.732	68.291	68.291	2.732	68.291	68.291
2	.521	13.013	81.304			
3	.469	11.735	93.038			
4	.278	6.962	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]	
	Component
	1
Cognitive Environment: Individuals know how to protect a new business legally.	.802
Cognitive Environment: Those who start new businesses know how to deal with risk.	.860
Cognitive Environment: Those who start new businesses know how to manage risk	.866
Cognitive Environment: Most people know where to find info about markets for their products.	.774
Extraction Method: Principal Component Analysis.	

a. 1 components extracted.

F6: Cognitive environment reliability

Reliability Statistics		
Cronbach's Alpha	**Cronbach's Alpha Based on Standardized Items**	**N of Items**
.843	.844	4

Summary Item Statistics							
	Mean	**Minimum**	**Maximum**	**Range**	**Maximum / Minimum**	**Variance**	**N of Items**
Inter-Item Correlations	.576	.511	.712	.201	1.394	.005	4

F7: Desirability validity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.500
Bartlett's Test of Sphericity	Approx. Chi-Square	117.733
	df	1
	Sig.	.000

Communalities		
	Initial	**Extraction**
Desirability: I would love it	1.000	.890
Desirability: I would be enthusiastic	1.000	.890
Extraction Method: Principal Component Analysis.		

Total Variance Explained						
Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	1.780	89.007	89.007	1.780	89.007	89.007
2	.220	10.993	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]	
	Component
	1
Desirability: I would love it	.943
Desirability: I would be enthusiastic	.943
Extraction Method: Principal Component Analysis.	

a. 1 components extracted.

F8: Desirability reliability

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.876	.876	2

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.780	.780	.780	.000	1.000	.000	2

F9: Feasibility validity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.719
Bartlett's Test of Sphericity	Approx. Chi-Square	165.239
	df	10
	Sig.	.000

Communalities		
	Initial	Extraction
Feasibility: It would be very easy	1.000	.562
Feasibility: I would be certain of success	1.000	.547
Feasibility: I would not be overworked	1.000	.310
Feasibility: I know enough to start a social business	1.000	.638
Feasibility: I am sure of myself	1.000	.468

Extraction Method: Principal Component Analysis.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.525	50.490	50.490	2.525	50.490	50.490
2	1.088	21.761	72.251			
3	.526	10.520	82.771			
4	.475	9.500	92.271			
5	.386	7.729	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]	
	Component
	1
Feasibility: I know enough to start a social business	.799
Feasibility: It would be very easy	.750
Feasibility: I would be certain of success	.739
Feasibility: I am sure of myself	.684
Feasibility: I would not be overworked	.557

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

F10: Feasibility reliability

Reliability Statistics		
Cronbach's Alpha	**Cronbach's Alpha Based on Standardized Items**	**N of Items**
.751	.750	5

Summary Item Statistics							
	Mean	**Minimum**	**Maximum**	**Range**	**Maximum / Minimum**	**Variance**	**N of Items**
Inter-Item Correlations	.375	.076	.558	.482	7.326	.021	5

F11: Social entrepreneurial intentions validity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.929
Bartlett's Test of Sphericity	Approx. Chi-Square	855.919
	df	36
	Sig.	.000

Communalities		
	Initial	**Extraction[a]**
Social entrepreneurial intentions: I am ready to do anything to be an social entrepreneur	1.000	.461
Social entrepreneurial intentions: My professional goal is to be an social entrepreneur	1.000	.725
Social entrepreneurial intentions: I will make every effort to start and run my own social enterprise	1.000	.717
Social entrepreneurial intentions: I am determined to create a social entrepreneurial venture in the future	1.000	.813
Social entrepreneurial intentions: I do not have doubts about ever starting my own social enterprise in the future	1.000	.692
Social entrepreneurial intentions: I have very seriously thought of starting a social enterprise in the future	1.000	.761
Social entrepreneurial intentions: I have a strong intention to start a social enterprise in the future	1.000	.740
Social entrepreneurial intentions: My qualification has contributed positively towards my interest in starting a social enterprise	1.000	.576

Communalities		
	Initial	Extraction[a]
Social entrepreneurial intentions: I had a strong intention to start my own social enterprise before I started with my qualification	1.000	.425

[a]Extraction Method: Principal Component Analysis.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.910	65.665	65.665	5.910	65.665	65.665
2	.746	8.288	73.953			
3	.635	7.059	81.012			
4	.501	5.568	86.580			
5	.344	3.820	90.400			
6	.272	3.026	93.426			
7	.242	2.693	96.119			
8	.194	2.157	98.276			
9	.155	1.724	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]	
	Component 1
Social entrepreneurial intentions: I am determined to create a social entrepreneurial venture in the future	.902
Social entrepreneurial intentions: I have very seriously thought of starting a social enterprise in the future	.873
Social entrepreneurial intentions: I have a strong intention to start a social enterprise in the future	.860
Social entrepreneurial intentions: My professional goal is to be an social entrepreneur	.852
Social entrepreneurial intentions: I will make every effort to start and run my own social enterprise	.846
Social entrepreneurial intentions: I do not have doubts about ever starting my own social enterprise in the future	.832
Social entrepreneurial intentions: My qualification has contributed positively towards my interest in starting a social enterprise	.759
Social entrepreneurial intentions: I am ready to do anything to be an social entrepreneur	.679
Social entrepreneurial intentions: I had a strong intention to start my own social enterprise before I started with my qualification	.652
Extraction Method: Principal Component Analysis.	

a. 1 components extracted.

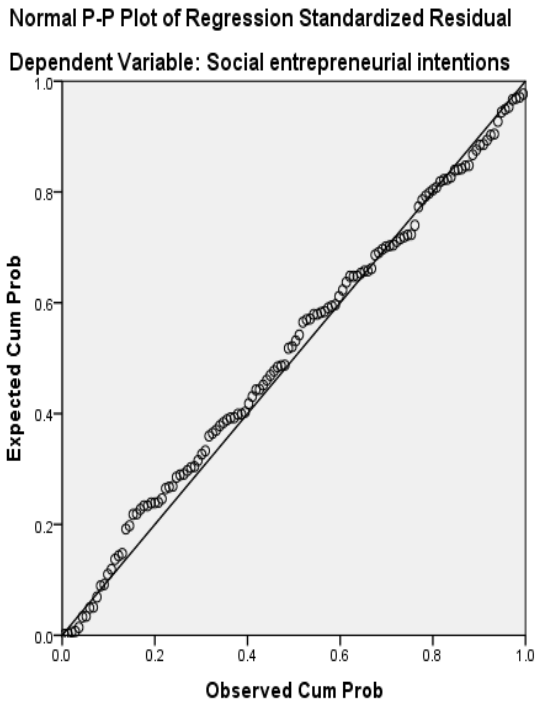
F12: Social entrepreneurial intentions Reliability

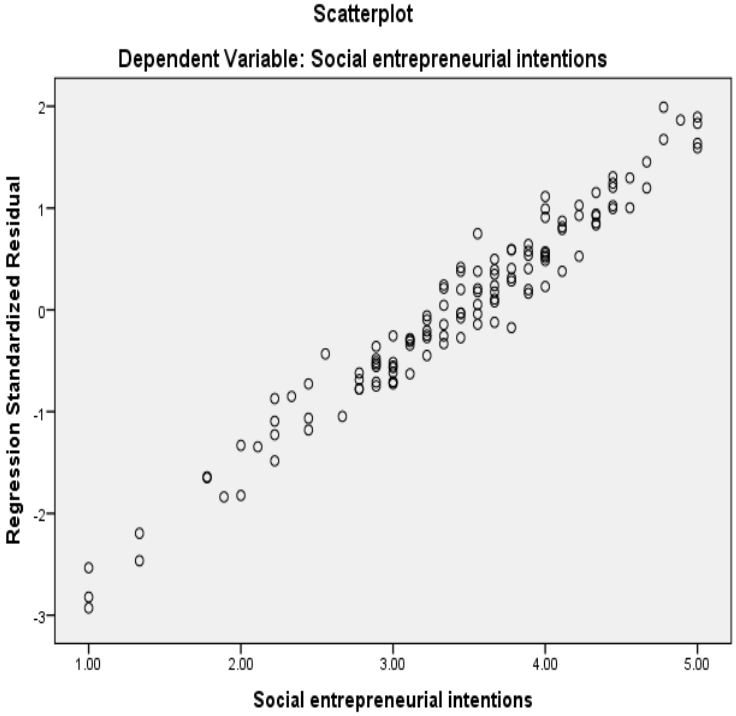
Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.932	.933	9

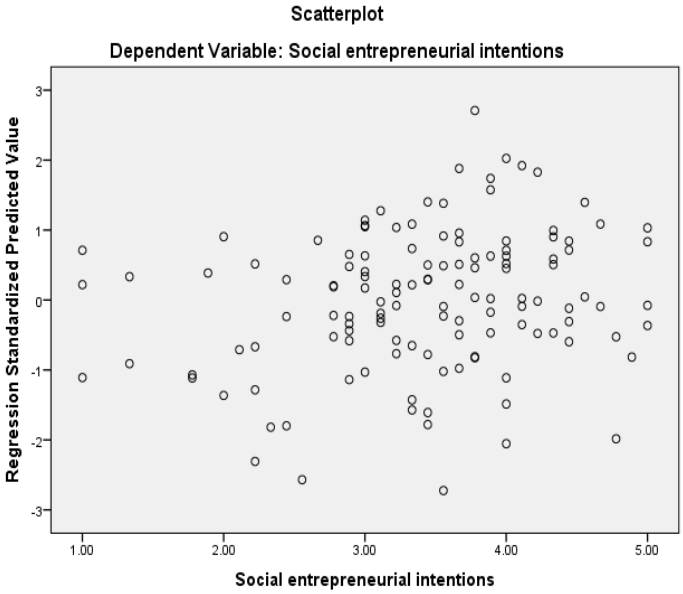
Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.607	.385	.804	.419	2.087	.013	9

APPENDIX G

Regression Scatter Plots






Scatterplot
Dependent Variable: Social entrepreneurial intentions
Regression Standardized Predicted Value
3
2
1
0
-1
-2
-3
1.00
2.00
3.00
4.00
5.00
Social entrepreneurial intentions