

An Empirical Investigation into Determinants of Social Entrepreneurial Intentions

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CERTIFICATE

This is to certify that the thesis entitled "**An Empirical Investigation into Determinants of Social Entrepreneurial Intentions**" and submitted by **Preeti Tiwari, ID No. 2011PHXF037P** for the award of Ph.D. degree of the institute, embodies original work done by her under our supervision.

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ABSTRACT

Countries like the US and the UK are increasingly prioritising the phenomenon of social entrepreneurship in their public policies to create a socially oriented enterprise culture, achieve greater social inclusion, increase job opportunities and deliver cost-efficient public services (Dees, 1998; Pirson, 2012). In developed and developing countries social entrepreneurs are consistently bringing a profound social change by addressing some of the most pressing social problems such as poverty, social inclusion, inadequate public services and environmental problems (Dacin *et al.*, 2011). Along with the priority given to social value creation, social entrepreneurs are also generating economic value to ensure their own financial viability (Mair and Marti, 2006) and indulging in delivering innovative solutions. Therefore, their prevalence is critical for the developing countries with higher levels of state issues like corruption, education, health and social unjust for e.g. poverty, financial exclusion, illiteracy etc. (Peredo and McLean, 2005).

In the field of social entrepreneurship research, most of the studies based in the international context are focusing on individual cases offering individual-level analysis, they are overlooking the antecedents and prerequisite which are necessary to encourage the social entrepreneurial activities in those regions (Mair and Marti, 2006; Nga *et al.*, 2010). To encourage and support the social enterprises, it is required to closely analyse and understand the factors that affect the thinking process of the individuals. This research is guided by a similar intention to explore the factors that will prove to be helpful in promoting social entrepreneurial activities in India.

There is little knowledge, especially theory-driven, about what causes entrepreneurial action, even less so for social entrepreneurial action (Krueger *et al.*, 2008). To predict the creation of an enterprise, the stage previous to venture creation is of relevance (Scheiner, 2009). When analysing the ladder leading up to becoming an entrepreneur, academic research habitually applies the notion of intention formation. This approach is adapted to the field of social entrepreneurship for this thesis as well. Moreover, Mair and Noboa, 2006 stated that it is important for the researchers to investigate the formation of behavioural intentions and to further investigate the sources and antecedents of the behavioural intentions towards social entrepreneurship among individuals. That has lead to the motivation for taking up this study.

The research question that has motivated to take up this study is: “**How are the intentions to become a social entrepreneur get formed at the individual level?**”

While the findings can hopefully be used to design more effective educational programs, policies, support system, it must be added that the objective of the thesis is not to develop an ideal educational program for social entrepreneurship or social entrepreneurs. Rather, it takes a more holistic approach by attempting to understand social entrepreneurial intentions formation process as a whole. Nonetheless, some findings can certainly be applied to social entrepreneurial education. The broad objectives of this research are to i) identify the critical antecedents affecting the formation of social entrepreneurial intentions; ii) propose and empirically test a theory-driven model of social entrepreneurial intentions based on the identified critical antecedents; iii) refine the previously tested model of social entrepreneurial intentions on a sample of nascent social entrepreneurs; and iv) retrospectively validate the final model of social entrepreneurial intentions on a sample of social entrepreneurs.

A review of the literature in entrepreneurship, intention and social entrepreneurship was carried out to identify the antecedents and developing the theoretical framework and proposed a model for the present study. For empirically testing the proposed model structural equation modelling (SEM) was applied. A structured questionnaire was used for the data collection from 2 sets of populations as undergraduate students and nascent social entrepreneurs. The sample of undergraduate students (1432 respondents) was first used for empirically testing the model and later the sample of nascent social entrepreneurs (345 respondents) was used for validating the model. Later, the model was also tested qualitatively by taking the opinion of 9 social entrepreneurs.

This research study is novel in the way that the antecedents and social entrepreneurial intention are assessed on two different samples. There are few studies that examined factors related to social entrepreneurship intentions formation. The present study is the first to examine the relationships between personality traits, prosocial personality traits, social factors and enablers and social entrepreneurial intentions. The study has practical implications for the government, policy makers, academic universities and society at large for increasing social entrepreneurial activity.

Keywords: *Social Entrepreneurship, Intentions, Antecedents, Theory of Planned Behaviour, Nascent Social Entrepreneurs.*

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LIST OF ABBREVIATIONS

ATB	Attitude toward becoming a social entrepreneur
AGFI	Adjusted Goodness-of-Fit
AVE	Average variance explained
CFA	Confirmatory factor analysis
CFI	Comparative Fit Index
Cr	Creativity
EduBkg	Entrepreneurial/social educational background
EFA	Exploratory factor analysis
EmIn	Emotional intelligence
Emp	Empathy
GFI	Goodness –of-Fit
ILOC	Internal Locus of control
Inno	Innovativeness
MO	Moral obligation
PBC	Perceived behaviour control
PCFI	Parsimonious fit measures
PreExp	Previous experience with societal activities

Pro	Proactivity
PSP	Perceived social support
RMR	Root mean square residual
RMSEA	Root mean square error of approximation
RTP	Risk taking propensity
SE	Social Entrepreneurship
SE	Social Enterprise
SeEff	Self-efficacy
SEI	Social entrepreneurial intentions
SEM	Structural Equation Modelling
SEn	Social Enterprise
SEnt	Social Entrepreneur
SN	Subjective norms
SR	Social responsibility
TLI	Tucker Lewis Index
TPB	Theory of planned behaviour

Chapter 1

INTRODUCTION

1.1 Introduction

Countries like the US and the UK are increasingly prioritising the phenomenon of social entrepreneurship in their public policies to create a socially oriented enterprise culture, achieve greater social inclusion, increase job opportunities and deliver cost-efficient public services (Dees, 1998; Pirson, 2012). In developed and developing countries social entrepreneurs are consistently bringing a profound social change by addressing some of the most pressing social problems such as poverty, social inclusion, inadequate public services and environmental problems (Dacin *et al.*, 2011). Along with the priority given to social value creation, social entrepreneurs are also generating economic value to ensure their own financial viability (Mair and Marti, 2006) and indulging in delivering innovative solutions. Therefore, their prevalence is critical for the developing countries with higher levels of state issues like corruption, education, health and social unjust e.g. poverty, financial exclusion, illiteracy etc. (Peredo and McLean, 2005).

While most of the studies based in the international context are focusing on individual cases offering individual-level analysis, they are overlooking the antecedents and prerequisite which are necessary to encourage the social entrepreneurial activities in those regions (Mair and Marti, 2006; Nga *et al.*, 2010). To encourage and support the social enterprises, it is required to closely analyse and understand the factors that affect the thinking process of the individuals. This research is guided by a similar intention to explore the factors that will prove to be helpful in promoting social entrepreneurial activities in India.

1.2 Need & Motivation for the study

There is little knowledge, especially theory-driven, about what causes entrepreneurial action, even less so for social entrepreneurial action (Krueger *et al.*, 2008). To predict the creation of an enterprise, the stage previous to venture creation is of relevance (Scheiner, 2009). When analysing the ladder leading up to becoming an entrepreneur, academic research habitually applies the notion of intention formation. This approach is adapted to the field of social entrepreneurship for this thesis as well. Moreover, Mair and Noboa, (2006) stated that it is important for the researchers to investigate the formation of behavioural intentions and to further investigate the sources and antecedents of the behavioural intentions towards social entrepreneurship among individuals. That has led to the motivation for taking up this study.

1.3 Research Question

The research question that has motivated to take up this study is: **“How the intentions to become a social entrepreneur are get formed at the individual level?”**

While the findings can hopefully be used to design more effective educational programs, policies, support system, it must be added that the objective of the thesis is not to develop an ideal educational program for social entrepreneurship or social entrepreneurs. Rather, it takes a more holistic approach by attempting to understand social entrepreneurial intentions formation process as a whole. Nonetheless, some findings can certainly be applied to social entrepreneurial education.

1.4 Objectives of the Research

The broad objectives of this research are to:

1. identify the critical antecedents affecting the formation of social entrepreneurial intentions.

2. propose and empirically test a theory-driven model of social entrepreneurial intentions based on the identified critical antecedents.
3. refine the previously tested models of social entrepreneurial intentions on a sample of nascent social entrepreneurs.
4. retrospectively validate the final model of social entrepreneurial intentions on a sample of social entrepreneurs.

1.5 The Scope of the Research Study

The purpose of the present research study is twofold. The first aim of the study is to assess the social entrepreneurial intentions and identify the most critical antecedents affecting the formation of social entrepreneurial intention among undergraduate students of technical universities in India. The second aim of the study is to validate the derived model on a sample of nascent social entrepreneurs in India. A pilot study was conducted on a sample of five hundred fifty students of a premier technical university. Data for the pilot study was collected from September 2014 to October 2014.

For the first aim of the study, primary data has been collected through distributing the questionnaire using quota sampling from the undergraduate students of 7 premier technical universities in India (IIT Delhi, IIT Madras, IIT Bombay, IIT Kharagpur, IIT Kanpur, IISc Bangalore, and BITS, Pilani). Responses were collected from third year and final year students of engineering as they are more clear about their professional choices. Beside this according to the recent report published IITs ranked fourth in the world for producing unicorn startups in the world (*Business Insider, 2017*). Therefore, it is interesting to study that what this population think about social entrepreneurship as a career option.

The data was collected from January 2015 to February 2016, by personally administering the questionnaire to the undergraduate students. Total 1432 completed questionnaire were collected out of 2000 distributed questionnaires. The sample of undergraduate students aged between 17-21 years. Out of total 1432, sample 88% (1260) were male and 12% (172) were female.

The second set of sample has been collected from nascent social entrepreneurs. A total 345 responses were collected and snowball sampling has been used. The respondents aged between 20-35 years. The rationale of the second sample is that in entrepreneurial intentions study intentions were used as a dependent variable which involves the possibility of not differentiating among ‘dreamers’ and ‘doers’. Therefore, validating the results on a sample of nascent social entrepreneurs who have taken the actual behavioural step is always considered as an appropriate method. This data was collected from March 2016 to May 2016 through personally administered questionnaire and through online.

For the qualitative validation of this research study, we collected data from social entrepreneurs. A sample of social entrepreneurs is used because their intention is converted into actual behaviour. Therefore, they can provide evaluate regarding the utility of the developed social entrepreneurial intention model.

1.6 Organisation of the Thesis

The thesis is organised into eight chapters. The brief description of the chapters is as follows:

Chapter 2: Literature Review

An extensive review of the literature in the field of social entrepreneurship in the three broad categories namely, Entrepreneurship theory and practices, Motivation of intentions

and social entrepreneurship intention formation is undertaken in this chapter. The research gaps are also identified for proposing a research framework.

Chapter 3: Proposed Conceptual Framework and Hypotheses Development

This chapter portrays the conceptual research framework of social entrepreneurship intention. This proposed framework is drawn based on the understanding of various theories of entrepreneurship and psychology based on extant literature and later identified research gaps. This chapter also introduces the research questions and associated hypotheses.

Chapter 4: Research Design and Methodology

In this chapter research approach and research design is explained to carry out the research. This chapter explains the research process adopted and the various issues like (survey instrument development, modification in the survey questionnaire, sampling frame and data collection procedure and research techniques) related to the research design are explained.

Chapter 5: Data Analysis and Discussion

In this chapter, the developed framework is analysed using Structural equation modelling. All the developed constructs, managerial implications are summarised. Besides studying the applicability of the general theory of planned behaviour in the field of social entrepreneurial intention formation, the effect of each extension of the classical model (social entrepreneurial personality, prosocial personality traits, social factor and enablers) on social entrepreneurial intention formation is illustrated.

Chapter 6: Quantitative Validation: Using Nascent Social Entrepreneurs

The developed model is validated through a sample of nascent social entrepreneur's expert opinion survey. Feedbacks were taken from social entrepreneurs on the developed social entrepreneurial intention model and validity was established.

Chapter 7: Qualitative Validation: Through Expert Opinion of Social Entrepreneurs

This chapter deals with the qualitative validation of the social entrepreneurial intention models using a survey method.

Chapter 8: Conclusion and Future Scope of Research

This chapter includes a discussion on contributions to the research. The limitations are also provided by identifying its theoretical and implementation limits. This chapter also discusses the future scope of research.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

In this chapter, a critical and exhaustive literature review has been carried out and presented, which has provided the in-depth understanding of the subject to the researcher. An extensive review of literature on the evolution of social entrepreneurship, commercial entrepreneurship versus social entrepreneurship, defining Social entrepreneurship in academia, emergence & need of social entrepreneurship in India, social entrepreneurship research in India, reason to emphasize on Intentions in Entrepreneurial context, theories and models explaining the process of entrepreneurial & social entrepreneurial intentions formation and the state of the knowledge contributed by other researchers have been undertaken.

2.2 Evolution of Social Entrepreneurship

Entrepreneurship can prove to be an effective instrument for economic value creation and simultaneously a means to deal with various social issues. This dual nature concept seems to be gaining popularity in both spheres of theory and practice, with the rise of a new field of research: “social entrepreneurship”. The last couple of years witnessed the rise of social initiatives that are working in the various untouched sector for the development of the people, for the society and for the country as a whole. For example Grameen Bank (Bangladesh), Sekem (Egypt), Barefoot College (India), Selyn Fairtrade Handloom (Sri Lanka) and Juhudi Kilimo (South Africa) etc. All these social enterprises have one motive i.e. working toward the betterment of the people of their respective country.

The roots of social entrepreneurship lie in the evolution of the private sector. Though for a long time, the symbiosis of government, business and NPOs addressed the social needs, yet inequalities and loopholes still existed, particularly in the under-developed nations. One such country is Bangladesh where the concept of present day's social entrepreneurship first germinated (Bornstein and Davis, 2010). Mohammed Yunus, a banker and a professor, brought forward the idea of micro-loans for the poor helping them to turn into entrepreneurs (Yunus, 2006). Based on his notion of efficient service to the downtrodden, Yunus founded the Grameen Bank. This institution earns through the interest paid by the creditors, thus giving a new definition to 'non-profit' service. Along with Grameen Bank, surfaced several other initiatives and in course of time, social entrepreneurship earned a global appeal. Bill Drayton, a former McKinsey management consultant visited India, witnessed new social enterprise to sprout and appreciated the role of such sustainable initiatives (Bornstein and Davis, 2010). Consequently, he founded Ashoka, which due to its global setting and public relations, emerged to be significant in supporting the social entrepreneurs (Defourny and Nyssens, 2010). Recognising incipient social entrepreneurs, Ashoka assists them through a bunch of ways. Worldwide developments also boosted social entrepreneurship via various ways. To mention a few among them are the fall of dictatorial rules as an outcome of reformation by the liberation forces, like the ones advocating women' empowerment and a global media such as the internet enabling perception of individual opinions with respect to a wider ambience (Bornstein and Davis, 2010).

The last couple of years has witnessed the rise of social entrepreneurs who are working in the various untouched sectors for the development of people, society and for the country as a whole (Howorth *et al.*, 2012). Keeping the priority towards social value creation unaltered, these entrepreneurs are aptly stabilising themselves in terms of

financial viability by creating consistent economic values (Young and Kim, 2015). Social entrepreneurship has received a greater visibility as a distinct domain by academics, scholars, businesses and government organisations (Bull, 2008). For example, countries like the US and the UK are increasingly prioritising this phenomenon in their public policies to create a socially oriented enterprise culture, achieve greater social inclusion, increase job opportunities and deliver cost-efficient public services (Short, *et al.*, 2009). In developed and developing countries social entrepreneurs are consistently bringing a profound social change by addressing some of the most pressing social problems such as poverty, social inclusion, inadequate public services and environmental problems (Zeyen *et al.*, 2012). Along with the priority given to social value creation, social entrepreneurs are also generating economic value to ensure their own financial viability (Mair and Marti, 2006) and delivering innovative solutions.

By coming up with avant-garde ways to deal with extant concerns, they are proving themselves indispensable for the developing nations infested with state issues (corruption, deplorable health, and academic conditions etc.) and social injustice (poverty, illiteracy etc.) (Austin *et al.*, 2006). Therefore, their prevalence is critical for developing countries with higher levels of state issues like corruption, lack of education or health and socially unjust, for e.g. poverty, financial exclusion, illiteracy etc (Ridley-Duff, 2008). It can be considered as a catalyst in the form of social capabilities to conquer inequalities across different spheres (social, economic and political) (Light, 2006; Mair, 2008; Seelos and Mair, 2005). The enthusiasm about social entrepreneurship is palpable from the special issues of prominent journals on this topic, universities seeking research faculty eager to work in this field as well as numerous conferences being arranged worldwide (Thomas and Mueller, 2000).

According to World Bank report, approximately 2.5 billion people survive on \$2 or less a day. And nearly 1.4 billion people are bound to live on \$1.25 a day. Nearly half of the world population is struggling with basic needs such as food, water, housing, medication, education and employment. Several developing countries did not have adequate capital that can be used to stimulate economic conditions and for the protection of the socially underprivileged population.

As stated in World of work report (2008) continuing phase of recession is affecting people of developing countries excessively (Torres, 2008). This catastrophe was put on the air mostly by trade and financial flows which push millions of people toward poverty. Millennium Development Goals by UN (2000) seems next to impossible to attain by some of the developing countries. According to the United Nations, the richest 20 percent of the world's population receive more than 80 percent of the world's income; the poorest 20 percent receive less than 2 percent. The poorest 60 percent receive less than 6 percent of the world's income.

Therefore in order to change this phenomenon, we required certain serious initiatives that work in different areas in order to solve unsolved problems in a more sustainable form. World Bank in the year 1987 describes this trend as sustainable development. According to World Bank "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Soubbotina, 2004).

In order to attain such sustainable development, what we require some "social actors" that are audacious enough to stand against all odds. In short, for such paradigm shift, there have to be social leaders- those exceptional leaders who can work in an innovative way and motivate others to do so (Steyaert and Hjorth, 2006). Schumpeter

describes these exceptional leaders as “Man of Action” and he further defines him as a person who is not ready to acknowledge reality as it is. According to Schumpeter theory of economic development, the main carrier of economic development is the pioneering entrepreneur (Hagemann, 2013).

Social entrepreneurship is a part of entrepreneurship, strategies and entrepreneur skills of social entrepreneurs is not specifically used for profit but for the betterment of the society (Rametse and Shah, 2013). The major challenge in understanding social entrepreneurship lies in understanding the limitations of what we mean by social. The term “social” refers to initiatives aimed at helping others (Yunus *et al.*, 2010). Social entrepreneurship is the sign of philanthropy. It is based on moral function and moral liability (Tanabe, 2012). In other words, profit creation might be “central idea” of entrepreneurship it does not neglect other motivational factors. As several researchers have pointed out that all business is social in the sense that it creates value (Sriram, 2011). Researchers point out that philanthropy and entrepreneurship vary only in degree, not in type. Previous research on entrepreneurship has pointed out that social enterprise is "social" in the sense that they are not owned by particular shareholders and profit is not the motivating purpose (Christiansen, 2008).

2.3 Commercial Entrepreneurship versus Social Entrepreneurship

Social entrepreneurship is similar to the commercial business entity in opportunity recognition, innovation, creativity, self-efficacy, social support system and venture funding (Dees and Elias, 1998). These similarities lie due to the fact that the affirmation of social entrepreneurship seems to be associated with the inception of an entrepreneurial phenomenon, which imitates an aspiration to restore the equilibrium between its two principle factors viz. the economy and social development (Prabhu, 1999). In contrast to

that, various papers have focused on recognising social entrepreneurship as a separate field of research (Peredo and McLean, 2006). The major difference between the two concepts is associated with the “mission”. Commercial entrepreneurship (which facilitate society with essential goods, services, and jobs) has the primary mission is to maximise profits whereas social entrepreneurship’s main idea is to generate and maximise social value (Roper and Cheney, 2005).

Different researchers describe social entrepreneurship differently. Social enterprise, non-profits, social cooperative enterprise and community enterprise are just some of the distinct phenomena discussed and analysed under the “umbrella construct” of social entrepreneurship (Mair *et al.*, 2006). Dees(1998) defined social entrepreneurship as a process that begins with perceived social opportunity, transfers it into an enterprise model, determine and achieves the wealth essential to execute the enterprise, initiates and grows the enterprise and yields the future upon goal achievement of the enterprise’s goal” (Dees and Elias, 1998).

Apart from core mission and individual characteristics, another concrete distinction can be made on the basis of assessment of the outcomes or values sought by an enterprise. Where the metric of success for a commercial enterprise is the economic value generated by it, the metric for measuring the contribution by a social enterprise comprises both economic and social value (Zahra, 2009). According to Dees (1998) any attempt to define social entrepreneurship should centralise the entrepreneurial component that fosters innovation and appreciates the risk undertaken by a social entrepreneur. Besides the central aim and intrinsic features of each, an enterprise of respective kind differs in the outcomes or values sought by it. The generation of economic value for a commercial enterprise, the same changes to both social and economic values in the case of a social enterprise (Wilson *et al.*, 2007).

A number of researchers have observed that the difference between for-profit and social enterprise lies with respect to the motivation, the opportunity and the results. First, according to the literature, social entrepreneurs mainly work by tapping inspiration and creativity. They are motivated by a strong aspiration to change society and aim for value in the form of transformational change that will benefit disadvantaged communities and ultimately society at large (Peredo and McLean, 2005). Second, in addition to for-profit prospect, social entrepreneurs are sensitive to a different – social type of opportunities (Dees and Elias, 1998). Finally, social entrepreneurs differ from for-profit entrepreneurs in their mission as social entrepreneurs are inclined toward creating social value while for-profit entrepreneurs give more emphasis toward creating economic value (Crossan *et al.*, 2011).

The greater part of the literature on social entrepreneurship has generated within the area of research on non-governmental and not-for-profit organisations. Some researchers suggest that social enterprises that carry out for-profit activity to maintain other non-profit activities can be viewed as social entrepreneurs (Welsh and Krueger, 2009).

On the basis of literature, major criteria that differentiate social enterprise from the commercial enterprise are stated in Table 2.1.

Table 2.1: Difference between Social Entrepreneurship and Commercial Entrepreneurship

Basis	Social Entrepreneurship	Commercial Entrepreneurship
Market failure	Researchers highlighted that social entrepreneurship come into sight when there is social-market breakdown i.e. to meet social needs (Liu <i>et al.</i> , 2015).	Commercial organisations appear to maximise profit; though they also do well in society with valuable goods, services, and jobs.
Mission	The most important function of social entrepreneurship is generating social value for the public good. They believe in generating and using economic profit as a way to resolve a social problem (Wang and Li, 2009).	Profit enterprise tries at creating lucrative businesses resulting in personal gain and they breed economic value for individual and stakeholder wealth maximisation. They are formed as a consequence of a perceived economic opportunity.
Resource	For resources, social enterprise mainly	The for-profit organisation is relatively less

mobilization	depends on volunteers who share a common vision of mitigating socio-environmental problems. Resource mobilisation for social enterprise is very different in SE (Austin and Reficco, 2009).	restricted by resource limitation. They have varied sources of financial support available to them based on their economic proposition (e.g. the market, venture capitalists, banks), and they can afford the best human resources available.
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To sum up, this thesis understands social entrepreneurship as a form of entrepreneurship. A social entrepreneur runs a business that marries a core social mission with a competitive value proposition. Acting entrepreneurially, this involves the introduction of innovative products or services in competitive markets through which not only revenues (economic value) are generated, but also social value. Acting socially, this social mission dominates the economic mission of the social enterprise. This means that while the company acts within a market, earning money competitively, its primary focus is to combat certain social problems, e.g., poverty or homelessness. Due to this perspective, decisions are always made in favour of the social cause in focus – even if it means lower profits or loss of revenue. Finally, it is not necessary for the social enterprise to change an entire country or the world; it should rather focus on the scope which is most effective for its cause.

2.4 Defining Social Entrepreneurship in Academia

Social enterprises habitually bend towards a non-profit business model, as they are society-oriented organisations. The literature on social entrepreneurship basically focuses on various domains. Some researchers focus on the use of the business model in order to create social value and social wealth (Zahra *et al.*, 2009). Centre of attention for other researchers is towards social objectives or social mission, in order to maintain a balance between social purpose and achieve economic efficiency to attain sustainability in the market (Smith-hunter, 2008). On the other hand, most prominently, research has tried to find out the characteristics of a movement that constitutes SE (Rametse and Shah, 2012).

With the problem of the rapidly rising global population, hasten global expansion and associated exploitation of resources and its impact on the environment, it seems increasingly evident that business, as usual, is not an option for a sustainable future (Bocken *et al.*, 2014). Therefore, in order to control this, a sustainable business model is required. The sustainable business model offers an innovative approach to bringing the desired change through reconceptualising the mission of the enterprise and the value-creating logic and rethinking perceptions of value (Boons and Lüdeke-Freund, 2013). Social entrepreneurship starts comprehending a social opportunity, then passes it on to an enterprise model, amasses the necessary resources for execution, gives life to and nurtures the enterprise and eventually reaches the intended destination. The crucial problem for researchers in this field concerns with the distinguish facet of social entrepreneurship and its association with social innovation. Phillips *et al.*, (2015) described that the difference between these two interconnected concepts is that social innovation deals with actors that relocate resources in order to bring some sort of social change or societal renovation whereas social entrepreneurship focuses on the ideas in which actors control market demand in order to provide financial stability to the endeavours of the social problem (Tracey *et al.*, 2011).

Social innovation is not only a social activity but it refers to the set of innovative activities and functions that are working towards the goal of meeting a necessity that is mainly diffused through an enterprise whose main mission is social development (Mulgan, 2006), whereas social entrepreneurship is considered as the form of entrepreneurship (Defourny and Nyssens, 2010). These similarities lie due to the fact that the affirmation of social entrepreneurship seems to be associated with the inception of an entrepreneurial phenomenon, which imitates an aspiration to restore the equilibrium between its two principal factors, namely the economy and social development (Prabhu,

1999). Researchers also pointed out that social innovation is the broader concept and cannot be carried out in the isolation; hence, it is not wrong to say that social enterprise and social entrepreneurs exist within a domain of social innovation system (Phillips *et al.*, 2015).

The history of the social entrepreneurship suggested that in the year 1973, Davis wrote an article describing different opinions towards business highlighting social responsibilities (Davis, 1973) that present the different sides of entrepreneurship into the limelight. After this Young (1980) in his research article compared “non-profit entrepreneurs” to managers, focusing on their innovative actions in order to solve social issues. Five years later, in 1991, Sandra Waddock and James E. Post advanced the field with a more focused definition of entrepreneurs as private-sector leaders “*who play critical roles in bringing about “catalytic changes” in the public sector agenda and the perception of certain social issues*”. It was only the late 1990s that witnessed actual research in the field of social entrepreneurship (Wallace, 1999; Fowler, 2000; Johnson, 2000). This stream of researchers tried to put social entrepreneurship on par with entrepreneurship but still, social entrepreneurship failed to attract the attention of mainstream researchers in the field of entrepreneurship (Zahra *et al.*, 2009).

From the research perception, social entrepreneurship is at present undoubtedly enjoying an “emerging excitement” (Hirsch and Levin, 1999); however, as an academic area of research, it faces two major challenges. The first challenge is that social entrepreneurship is considered as a by-product of bigger concept social innovation and entrepreneurship, therefore, this evident from the lack of theoretical literature related to social entrepreneurship and lack of consensus regarding how to define social entrepreneurship as not been achieved. Second, social entrepreneurship research is

caught in-betweens seemingly demands significance and intransigence (Mair and Martí, 2006). One of the most prominent questions that cannot be adequately answered is: “how to define social entrepreneurship?” As suggested by various researchers, all businesses are social in the sense that they create values (Spear, 2005). Dees (1998) defined the role of the social entrepreneur in the development of the society. In brief, this definition can be stated as follows: Social entrepreneurs play the role of change agents in the social sector, by:

- Adopting a mission to create and sustain social value (not just private value);
- Recognising and relentlessly pursuing new opportunities to serve that mission;
- Engaging in a process of continuous innovation, adaptation and learning;
- Acting boldly without being limited by resources currently in hand; and
- Exhibiting a heightened sense of accountability to the constituencies served and for the outcomes created.

The definitions given by various researchers for several terms like social entrepreneurship, social entrepreneurs and social enterprise are given in Table 2.2, Table 2.3 and Table 2.4 respectively.

Table 2.2: Definition of Social Entrepreneurship

Author/s	Definitions
(Mort, <i>et al.</i> , 2003)	Social entrepreneurship is a multidimensional construct involving the expression of entrepreneurially virtuous behaviour to achieve the social mission, a coherent unity of purpose and action in the face of moral complexity, the ability to recognise social value- creating opportunities and key decision-making characteristics of innovativeness, proactiveness and risk-taking.
(Nicholls, 2010)	Social entrepreneurship creates innovative solutions to immediate social problems and mobilises the ideas, capacities, resources, and social arrangements required for sustainable social transformations.
(Prieto, 2014)	Social entrepreneurship may be defined as a professional, innovative, and sustainable approach to systemic change that resolves social market failures and grasps opportunities.

Table 2.3: Definition of Social Entrepreneurs

Author/s	Definitions
Dees (1998)	<p>Social entrepreneurs play the role of change agents in the social sector, by:</p> <ul style="list-style-type: none"> • Adopting a mission to create and sustain social value (not just private value) • Recognising and relentlessly pursuing new opportunities to serve that mission, • Engaging in a process of continuous innovation, adaptation, and learning, • Acting boldly without being limited by resources currently in hand, • Exhibiting a heightened sense of accountability to the constituencies served and for the outcomes created.
(Boschee, 1995)	<p>Social entrepreneurs are not-for-profit executives who pay increasing attention to market forces without losing sight of their underlying missions, to somehow balance moral imperatives and the profit motives – and that balancing act is the heart and soul of the movement.</p>
Bornstein (2004)	<p>People, who recognise social problems, then use traditional entrepreneurial principles to organise, create and manage ventures to facilitate social change." Social entrepreneurs are thus identified as "people who recognise and relentlessly pursue opportunities to create social value" (Bornstein, 2004). According to Barendsen and Gartner (2004), social entrepreneurs "approach social problems with an entrepreneurial spirit and business acumen." Bornstein (2004) states that social entrepreneurs "combine the savvy, opportunism, optimism and resourcefulness of business entrepreneurs, with the devotion and pursuit of 'social profit,' rather than business profit."</p>
(Chowdhury Imran and Filipe Santos, 2010)	<p>Individuals or private organisations that take the initiative to identify and address important social problems in their communities." Their focus is on the initial stages of developing new programs and includes specific activities such as raising awareness, identifying and acquiring resources, coordinating actions with other agencies, and setting up programs in ways that are consistent with modern management strategies.</p>

Table 2.4: Definitions of Social Enterprise

Author/s	Definitions
Dees (1994)	<p>Social enterprises are private organisations dedicated to solving social problems, serving the disadvantaged and providing socially important goods that were not, in their judgment, adequately provided by public agencies or private markets. These organisations have pursued goals that could not be measured simply by profit generation, market penetration, or voter support.</p>
Haugh and Tracey (2004)	<p>Social enterprise/s are business/es that trades for a social purpose. They combine innovation, entrepreneurship and social purpose and seek to be financially sustainable by generating revenue from trading. Their social mission prioritises social benefit above financial profit, and if and when a surplus is made, this is used to further the social aims of the beneficiary group or community, and not distributed to those with a controlling interest in the enterprise</p>
(Bull, 2009)	<p>Social enterprises are businesses owned by nonprofit organisations, that are directly involved in the production and/or selling of goods and services for the blended purpose of generating income and achieving social, cultural, and/or environmental aims. Social enterprises are one more tool for non-profits to use to meet their mission to contribute to healthy communities.</p>
(Hockerts, 2015b)	<p>Social enterprises are businesses whose primary purpose is the common good. They use the methods and disciplines of business and the power of the marketplace to advance their social, environmental and human justice agendas.</p>

Thus on the basis of the literature, *“social entrepreneurship is a process that begins with perceived social opportunity, transfers it into an enterprise model, determine and achieves the wealth essential to execute the enterprise, initiates and grows the enterprise and yields the future upon goal achievement of the enterprise’s goal.* It can take many forms, from starting a business to expanding an organisation or to partnering with another firm (Short *et al.*, 2009). Researchers identified that social entrepreneurship is a process that can create value by utilising resources in innovative ways (Shaw and Carter, 2007). For fulfilling their primary motives, social enterprise explores and exploits opportunities that can create social value by facilitating social change or meeting social needs (Prieto, 2014).

2.5 Emergence & Need of Social Entrepreneurship in India

Social entrepreneurs in India are considered as the key players in delivering basic services and opportunities to the underdeveloped sectors like education, sanitation and healthcare facility to the weaker sector or underprivileged people of the society. Some are employing innovative, cost-efficient and often technology-driven business models that put forward essential services to those who are short of access. Others are working hard at removing barriers that prevent access (Intellectap, 2012). These social entrepreneurs are not only recognised in India but also on a global level. Many of these organisations work on an impressive scale – serving millions of low-income households and transforming their quality of life (Khanapuri and Khandelwal, 2011).

The utility of social entrepreneurship in a country like India is huge due to the presence of uncertainty and diversity of culture (Bornstein, 2007). While the country witnessed very high GDP rate, the social and economic challenges are dividing the country at an alarming rate. In spite of the fact that the hourly wage rates in India have

more than doubled over the few couple of years, the latest World Bank report states that approximately 350 million people in India currently live below the poverty line (GEM, 2015). In order to solve this problem, the socially conscious and emphatic citizens are joining hand together either as a civil society (Lan *et al.*, 2014) or individually, to create social enterprises that are working toward addressing several social problems in an affordable manner (Mair and Noboa, 2006).

“Social Entrepreneurship” has gained an increasing importance in India in recent years. India has started developing an environment that is supporting social entrepreneurs with incubators, mentoring, and financial support (Ghani *et al.*, 2013). Social entrepreneurship culture in India is young but very aggressive. Indian social entrepreneurial sector experienced a tremendous growth in the last couple of years. According to Intellectap report 2012, approximately half of the total existing social enterprises in India start their working only after 2007 (Intellectap, 2012). There are various social enterprises which are working with one mission i.e. “Better India”.

They are envisioned to have the potential of addressing some of the extant challenges in the Indian society. Just as in the case with other business initiatives, access to finance and other relevant support are also pre-requisites for social enterprises. Compared to traditional commerce, social enterprises carry an intrinsic risk factor with them. As they often lack the promise of outstanding dividends which can invite an investment, they might need to build new markets or device different infrastructure. The variability of the context for social commerce is evident in India, and it becomes quite difficult in regions badly seeking the development-focused innovation. From the findings on the impact investing landscape, social enterprise landscape, and market enablers, it's clear that the social enterprises in the vicinity of major metros are within a mature

ecosystem. They get endorsements from impact investors, incubators, network platforms, angels, consultants, market access facilitators, etc. But this favourable ambience is limited to cities. Recently the World Bank and the UK's Department for International Development (DFID) have come forward to build funding programs to support remote social enterprises also. Alongside, sector platforms like Sankalp and Unconvention's Unconvention-Local are operating small-scale local events to foster networking in minor cities.

Though a considerable knowledge is created by extra-academic sectors enthusiastic to pursue their ideas, a rising number of social entrepreneurship programs in India are contributing towards the academic research. In addition to effect a free flow of ideas, a global alignment might also cause subtle ascendancy of particular viewpoints on the arena of social entrepreneurial space and ways to address societal issues. Indian social entrepreneurship in India still, lacks institutional sincerity. The foreign impact funds rule the impact investment sector, and the efforts are centred on the scalable business models. Also, the budding venture capital funds in India with plentiful domestic and international capital prefer the higher dividend yielding urban technology start-ups (Sonne, 2012). To perceive the interventions which might create a friendly ambience for social entrepreneurial behaviour occurring, the social entrepreneurship researchers have to recognise the factors contributing to such behaviour. What we have now are well-established scales for the forebears of entrepreneurial behaviour (Oyugi, 2011) but no measures that allow us to determine the social impact aspect of social entrepreneurship. We still need to understand when and how do people turn into social entrepreneurs, not merely setting for a conventional profit-yielding venture?

This thesis aims to answer the question and shine the light of which are the major factors motivating individuals to turn into social entrepreneurs, thus eventually to foster

social entrepreneurship in India. The results can impact propagation and nurture the contributing elements in varying societies leading to an adoption of social entrepreneurial activity, like establishing academic programs for cultivating the crucial factors.

2.6 Social Entrepreneurship Research in India

Social entrepreneurs in India are considered as the key players in delivering basic services and opportunities to the underdeveloped sectors like education, sanitation and healthcare facility to the weaker sector or underprivileged people of the society. Some are employing innovative, cost-efficient and often technology-driven business models that put forward essential services to those who are short of access. Others are working hard at removing barriers that prevent access (Intellectap, 2012). These social entrepreneurs are not only recognised in India but also on a global level.

The utility of social entrepreneurship in a country like India is huge due to the presence of uncertainty and diversity of culture (Bornstein, 2007). While the country witnessed very high GDP rate, the social and economic challenges are dividing the country at an alarming rate. In spite of the fact that the hourly wage rates in India have more than doubled over the few couple of years, the latest World Bank report states that approximately 350 million people in India currently live below the poverty line (GEM, 2015). In order to solve this problem, the socially conscious and emphatic citizens are joining hand together either as a civil society (Lan *et al.*, 2014) or individually, to create social enterprises that are working toward addressing several social problems in an affordable manner (Mair and Noboa, 2006).

Social Entrepreneurship in India is not new to practice in India but new in academics. Only handfuls of researchers are working in the area of social

entrepreneurship. Although India is the home of various successful social enterprises like SKS Microfinance, Arvind eye care centre, Jaipur Rugs etc. but still social entrepreneurship research rise in India is still very young. The inclination of researchers toward this field started only after the publication the book on “The Fortune at the Bottom of Pyramid” by Prahalad (2004). The book was framed with an idea that low-income markets present prodigious market opportunities to the world wealthiest industries for their fortunes and bring prosperity and development for the poor people (Prahalad and Ramaswamy, 2004). The basic framework of this stream of researchers is mostly related to finding out the business model or business structures of these firms. Research studies have been so far conducted in India mostly used case studies or storytelling approach. They were more focused toward the concept of social innovation through incubators and government initiatives (Sonne, 2012) and towards cases of social entrepreneurs with the mission of rural development (Yadav and Goyal, 2015). Select research studies conducted in India in the field of social entrepreneurship are shown in Table 2.5.

Table 2.5: Select Social Entrepreneurship Studies in India

S. No.	Author(s)/ Year	Nature of Study
1	Mair and Ganly(2009)	Case study analysis of Gram Vikas in Orissa, India.
2	Seth and Kumar (2011)	An explorative case study regarding social entrepreneurial ecosystem in India.
3	Khanapuri and Khandelwal (2011)	Qualitative research study dealing with Fair Trade and scope of social entrepreneurship in India
4	Shukla (2012)	Working paper dealing with the contextual framework of social entrepreneurship in India.
5	Datta and Gailey (2012)	Case study analysis of women cooperatives in India
7	Chowdhury and Santos (2010)	Case study analysis of Gram Vikas in India.
8	Sonne (2012)	Case study of social business incubators like Villgro and Aavishkaar

Most of the literature available in the field of entrepreneurial intention or more specifically social entrepreneurship came from Europe and other Western countries. Short *et al.*, (2009) published a paper (now classic paper) in order to find out research gap in the social entrepreneurship field. In their paper, they highlighted that most empirical paper comes from U.K., with 24 (33%) and the U.S., with 18 articles (25%). Whereas rest from other countries 25 (35%). Four articles were published by Indian researchers. Social set-up and environmental factors affecting the process of social entrepreneurship is very different in this part of the world as compared to the factors covered in the existing research studies (Tiwari *et al.*, 2017).

The most familiar socio-cultural factors influencing entrepreneurship are education, religion, caste, family background and social background. In her article Shardha (2005) felt that sociocultural factors are important in the Indian environment for starting a business. Socio-cultural factors like education, religion, caste, family support and social background were considered by her and empirical results confirm that sociocultural factors are important in the creation of entrepreneurial intentions. Therefore, instead of comparing India to other countries, this research study concentrates on how social entrepreneurship intentions get generated in India. Ethnically, India has possessed a unique set of sensitivities and socio-psychological mindset. This paper tries to bridge this gap and validate the social entrepreneurial intention model in the Indian context.

2.7 Reason to Emphasise on Intentions in Entrepreneurial Context

Intentions can be defined as a belief that an individual is expected to perform a particular behaviour (Krueger, 2000). There exist several definitions unique to entrepreneurial intentions (Conner and Armitage, 1998). This thesis accepts the perceptions of Thompson (2009) who after evaluating several opinions ends up defining entrepreneurial

intentions as “*a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future*”. It’s obvious that consistency of action always stays unguaranteed. According to Ajzen, behavioural intention can be defined as the enactment of the intention of trying and doing something in the future (Ajzen, 1988).

The reason for using intentions to analyse start-up formation is as intentions are the immediate predictor of the actual behaviour of an individual. Entrepreneurship is a multi-step, conscious and planned process and all planned processes are intentional (Krueger *et al.*, 2000). Thus, taking into consideration entrepreneurship as a multi-step procedure heading toward venture development, intentions can be taken as opening step and should be carefully examined (Lee *et al.*, 2011). In the field of entrepreneurial intention research various intention models were used to study this phenomenon. These include the model proposed by Bird (1988) and developed by Boyd and Vozikis, (1994), the Shapero (1975; Shapero and Sokol, 1982) model tested by Krueger (1993), and the Davidsson, 1995 variation, which was used and modified by researchers to test university situation. These popular models are more or less similar in the sense that they all emphasis on the pre- entrepreneurial stage and integrate attitude and behaviour theory (Ajzen, 1991), and self-efficacy and social learning theory (Bandura and Bandura, 1997). Therefore, intentions are used as a mediator between influencing factors and behaviour (Krueger, 2000). Researchers emphasised that these antecedents do not directly affect intention but they affect attitude and which later influence intentions (Krueger, 2006).

Past researchers on entrepreneurship mostly deal with the issue of finding out the reason for why few people go for venture creation (Marzocchi, 2009; Shane *et al.*, 2003). Therefore the traditional way of merely looking into the difference between the traits of

entrepreneurs and non-entrepreneurs not able to solve this issue in an appropriate manner, as it might not necessarily be able to find out what persuaded them to choose for such path (Walter and Dohse, 2009). Therefore, to answer this question, the main emphasis of research should focus towards venture foundation. One common method is to follow and measure the whole procedure of inception. This method is hardly practicable because the entire process of venture inception is not an easy task, it may take months or years and quite possible that there may be sufficient time gap between idea and execution which is not feasible to measure (Cromie, 2000; Farrington, 2012). An additional way is to conduct a retrospective study of existing entrepreneurs and ask them about their journey and for forces that motivated them to choose such path.

Targeting on the course of action prior to venture formation, various types of techniques have been used by various researchers in order to generate more information about potential entrepreneurs (Liñán and Krueger, 2013). Early stream of researchers was mainly targeted to find out the relationship between traits and entrepreneurial behaviour. Although some characteristics are associated with entrepreneurs there is no direct relationship found linking the two (Gartner, 1985). Thus, the subject was excluded from the analyses and contextual factors supporting the renaissance of ventures took centre stage (Krueger and Carsrud, 1993). Many researchers were not satisfied with this process, thus they use a cognitive approach to investigate the cognitive processes that stimulate people to go for venture creation and the linking loop between these two actors. The most trendy approach to involving attitudes and behaviour is via incorporated into role models, including complementary levels like intentions (Ajzen, 1991).

2.8 Theories & Models in Entrepreneurial Intention Studies

In the Entrepreneurial Intention research studies, various models have been used over the year in order to measure entrepreneurial intentions (Bird, 1988; Boyd and Vozikis, 1994; Shapero, 1975; Shapero and Sokol, 1982; Ajzen, 1991; Krueger, 1993). An interesting facet of these intention models is that they did not test the actual behaviour but tried to focus on the factors leading and influencing intentions. Researchers in the field of entrepreneurship research suggested various factors that affect entrepreneurial intentions (Bird, 1988; Liñán, *et al.*, 2011; Morris *et al.*, 2001). These factors/antecedents are categorized as cognitive, motivational/ non-motivational or situational (Liñán and Chen, 2009; Shane *et al.*, 2003; Venkataraman, 2000). Therefore, intentions are used as a mediator between influencing factors and behaviour (Krueger, 2000). Researchers emphasised that these antecedents do not directly affect intention but they affect attitude and which later influence intentions (Krueger, 2006).

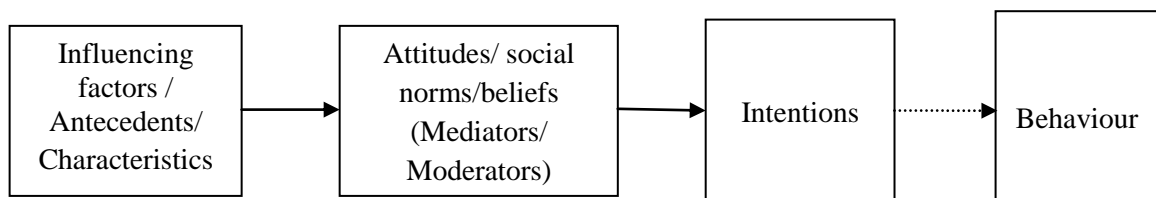


Figure 2.1: Basic Intentions Model (Krueger, 1993)

The following section discusses in detail two most used intention models viz. The theory of planned behaviour and Shapero’s theory of entrepreneurial event is discussed in details:

2.8.1 Shapero’s Theory of Entrepreneurial Event (1982)

Shapero and Sokol (1982) through their article “*The Social Dimensions of Entrepreneurship*” introduced this as the first member in the literature of intention models and it discusses entrepreneurial intention. Instead of the entrepreneur, they

accepted the entrepreneurial event as the unit of analysis. According to this model, the event serves as the dependent variable; while the individual and surrounding social, economic, political and cultural factors act as the set of independent variables. “*Each entrepreneurial event is an endpoint of a process and the beginning of another*” (Shapero and Sokol, 1982). It is necessary to analyse the psychological differences as the perception of an event has a variation in the individual level.

Shapero and Sokol (1982) investigated into two main questions: what initiates the action of changing one’s life? And why, among numerous options, do people choose a certain path? They claimed that individuals acquire alternate perceptions of the viability and desirability of things which lead to differing perceptions. The level of interaction between these two elements is such that the annulment of one often leads to the consequent elimination of the other. An individual has its values within, which are transmitted from its social environment including family, peers, and ethnic groups, educational and professional contacts. The desirability of that individual is driven by its values.

Shapero and Sokol’s (1982) model of the entrepreneurial event presents a process model of new enterprise formation (as shown in Figure 2.2). The researchers argued that inertia leads human action and as a result, there needed to be a transferable event to push or pull an individual to change course and in this case to found a business. In relation to the theory, the three major factors that are estimated to influence an individual’s intentions to act in a certain way are perceived desirability, perceived feasibility and propensity to act. Perceived desirability can be understood as how striking the idea starting up a venture is.

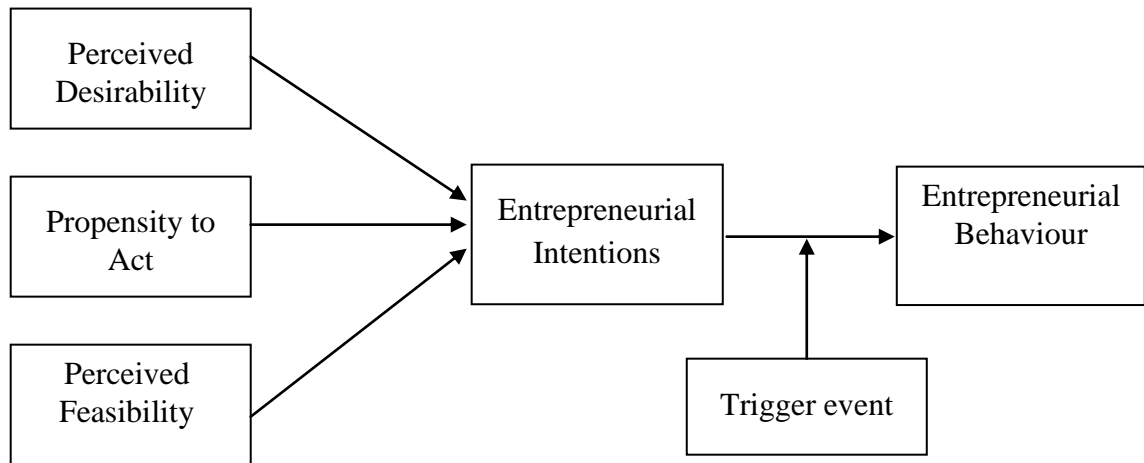


Figure 2.2: Entrepreneurial Event Model (Shapero and Sokol, 1982)

Perceived feasibility is the belief of the person that he/she is competent enough to initiate effectively a business whereas propensity to act is considered as the personal outlook to act on one's decisions (Izquierdo, 2011). Krueger (1993) in his research study out that these three factors of Shapero's theory explained half of the variance in the intention process whereas perceived feasibility emerged as the antecedent with highest explanatory power. Fitzsimmons and Douglas (2011) found that both perceived desirability and perceived feasibility showed a positive significant relationship with entrepreneurial intentions.

2.8.2 The Theory of Planned Behaviour

In the field of entrepreneurial intention research, one of the most adopted and used models is Ajzen's theory of planned behaviour (TPB) (Engle *et al.*, 2010). The theory of planned behaviour is the extension of the theory of reasoned (TRA) action by Martin Fishbein (1967). The theory of Reasoned Action (TRA) acts as a basis to study attitudes towards behaviours. It entitles behaviour intended to be the most significant determinant of an individual's behaviour. According to Martin Fishbein (1967) that if individual acts rationally having control over his actions it is possible to predict his actions based on his intentions as he will act exactly the way he intends to act. The TRA proposes that the

intention to execute an action has roots in the personal attitude towards the behaviour (ATB), and also in the social pressure in action to undertake that particular behaviour (known as the subjective norm SN) (Ajzen and Fishbein, 1980). The classical model of the theory of reasoned action given by Fishbein (1967) is shown in Figure 2.3.

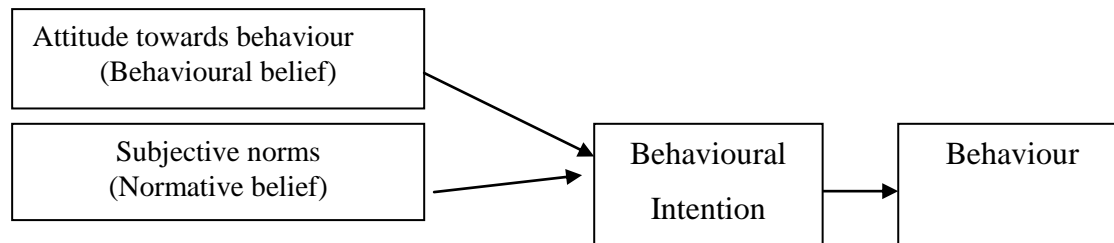


Figure 2.3: Classical Model of Theory of Reasoned Action (Source: Fishbein (1967))

An extension of the theory of reasoned action (TRA) is the theory of planned behaviour (TPB) (Ajzen, 1991). TPB expands the TRA by the determinant of perceived behavioural control (PBC) – an emergent from the social cognition models (Bandura, 1997). PBC is the degree of the subject’s belief that it is capable of performing a certain action. Thus, the TPB shows how the control that the subject thinks it has towards that particular behaviour influences their intention formation. The primary distinction between TRA and TPB lies in the third determinant of behavioural intention – PBC, which is regulated by two factors: Control Beliefs and Perceived Power.

TPB is based on the idea that intention to carry out specific behaviour is being shaped by person’s attitude toward behaviour and their ability to carried out that behaviour(Ajzen, 1991). He also mentioned that these intentions were the outcome of attitudes developed through past experience and individual characteristics (Ajzen, 1996). Although the theory of planned behaviour was initially developed in the field of psychology due to a wider scope and extensive applicability, TPB is very well adapted and used in various other fields (Iakovleva and Kolvereid, 2009; Krueger, 1993; Krueger and Carsrud, 1993;

Matthias Fink, 2013). One of the characteristics that make TPB very attractive is that standard model of TPB can be adapted and changed according to the specific domain of the study (Krueger *et al.*, 2000). Existing factors can be modified according to study's scope and nature, supplementary factors can be added, and causal links can be tailored (Iakovleva and Kolvereid, 2009). Modification in the standard TPB model is an essential prerequisite because nature and scope of each study are different (Kolvereid, 1996). Ajzen also mentioned that it is advisable to add antecedents of attitude towards behaviour (ATB), perceived behaviour control (PBC) and subjective norms (SN) in order to get additional insights (Ajzen, 1991).

For the purpose of this research “The theory of planned behaviour” is used as a research framework.

2.9 Adoption of the Theory of Planned Behaviour (TPB) for This Study

The value of the classical model of TPB in the research regarding entrepreneurial intention formation lies in its adaptability to suit specific fields. The extant constructs can easily be made suitable for study settings, new constructs can be included, and moreover, several causal links can be inserted. A necessary prerequisite is the adaptation of the classical TPB constructs as different studies focus on different target behaviour. In 1991, Ajzen himself advocated for extensions of the model to offer further understanding with particular emphasis on the significance of inserting precursors of ATB, PBC and SN (Ajzen, 1988).

Shook *et al.*, (2003) suggested researchers should try to examine and integrate different intention models. The two most used models in the field of entrepreneurial intentions are “the theory of planned behaviour” and “Shapero’s theory of entrepreneurial event”. The theory of planned behaviour is Ajzen (1991) said that

actions are followed by conscious judgments to act in a certain way. According to Ajzen, there are three determinants of intention to act. These are, “attitude toward the behaviour”, “subjective norm”; and “perceived behavioural control”. Whereas, Shapero and Sokol’s (1982) model of the entrepreneurial event presents a process model of new enterprise formation. In relation to the theory, the three major factors that are estimated to influence an individual’s intentions to act in a certain way are “perceived desirability”, “perceived feasibility” and “propensity to act”. Researchers pointed out that these two models are more or less similar to each other (Krueger and Lindahl, 2000). Shapero’s construct of perceived desirability is the combination of Ajzen’s attitude towards behaviour and subjective norms. Perceived feasibility explained by Shapero is similar to perceived behavioural control of TPB. In this research study, the theory of planned behaviour is adopted as a research framework the major advantages of the TPB is explained in the later part (chapter 3) of the thesis. But of the advantage of TPB is that by splitting perceived desirability into two different variables viz. attitude toward behaviour and subjective norms the theory of planned behaviour provides extra information as desirability is viewed as more differential manner (Mueller, 2011).

2.10. Select Research Studies on Social Entrepreneurial Intentions

Only a handful of research studies is found in literature done focusing on social entrepreneurial intentions as summarised in Table 2.6.

Table2.6: Select Research Studies in the field of Social Entrepreneurial Intentions

Author(s) & Year	About the study	Limitation
Mair and Noboa (2006)	The first attempt to develop a model that can capture social entrepreneurial intention formation.	This model lacks empirical validation.
Van <i>et al.</i> , (2009)	This study analysed the three critical catalysts that act as enablers to effect social entrepreneurial intentions.	Qualitative study used case study method. Analysis of three case studies failed to provide any major contribution to the social

Author(s) & Year	About the study	Limitation
		entrepreneurship literature.
Nga and Shamuganathan (2010)	This study investigated the effect of personality traits in predicting the characteristics of social entrepreneurship.	Elements of big five personality model do not show a significant relationship with social entrepreneurial intentions.
Ernst (2011)	This study antecedent like the personality traits, role model, age, gender, education and experience were taken to predict the social entrepreneurial intentions.	This research study fails to capture the type of support they will receive from their university if they opt for social entrepreneurship as a career.
Kirby (2011)	A research study in order to find out the role of social entrepreneurial education in Egypt.	An exploratory research study confined to find out the role of social entrepreneurial education.
Forster and Grichnik (2013)	This research study tried to empirically validate the Mair and Noboa(2006), model.	They used corporate social volunteers to predict social intention formation process. But comparing corporate volunteers with social entrepreneurship is not advisable.
Shumate <i>et al.</i> (2014)	This was a qualitative research study based on In-depth interviews with 20 social entrepreneurs and suggested that there are two possible paths that lead to the social entrepreneurship.	This failed to find out that whether these antecedents directly lead to the formation of social start-ups or required some mediators that facilitate this inception.
Germak, and Robinson, (2014)	This was a qualitative study to find out the motivating factors of the nascent social entrepreneurs	Failed to provide any empirical validation to the identified five themes.
Hockert's (2015, 2017)	This research study tried to empirically validate the model of Mair and Noboa (2006)	The major weakness of Hockerts study is that he only considered personal factor and completely ignore the effect of environmental factors. Further, he completely removes mediators from the model and tests the direct effect of antecedents on intention formation. Therefore, if we test the effect of these antecedents with the help of mediators than we can able to produce some different results as recommended by researchers (Ajzen, 1991; Krueger, Kickul, Gundry, Verman, & Wilson, 2007; Tkachev and Kolvereid, 1999; Vinogradov, <i>et al.</i> , 2013) that these antecedents did not affect intention directly.

The review of these studies is presented in next chapter.

2.11 Observations and Gaps From the Literature

A few observations have been made from the literature:

- Short *et al.*, (2009) in their classic paper detailed the gaps in the existing literature that need to be addressed by researchers in the field of social entrepreneurship. In their paper, they made an assessment of research of **20 years** and analysed domains of publication and citations. They found out that most research studies are descriptive (38%) and explanatory (55%) in nature. A research study that tried to find out the motivating factors of social entrepreneurs is only (7%). They highlighted raised various research questions that need to be answered. Hence there is an immense need to contribute towards *theory-based* empirical studies in the field of social entrepreneurship.
- Short *et al.*, (2009) have come up with various themes as opportunities for research in social entrepreneurship area. One of the research opportunity areas is to investigate "Are certain personality characteristics uniquely associated with social entrepreneurs?" Apart from that also investigating what enables or hinders social entrepreneurship and what motivates individuals to become social entrepreneurs.
- Dacin *et al.*, (2010) published an article in the "Academy of Management Journal" found out that most of the research articles in the field of social entrepreneurship tried to define social entrepreneurship or trying to find out what are the dimensions of social entrepreneurship. This classic paper also emphasised more theory-based research approach to understand the phenomenon of social entrepreneurship.
- Shepherd (2015) in his paper emphasised that the field of social entrepreneurship will not grow unless research questions are principally "*theory-driven*". In his

research paper he suggested potential research focus and related theories viz. social value creation, opportunity creation and discovery, risk-taking, innovation management, diffusion of innovation, role of technology, **process of venture creation**, relationship with institutions, simultaneous production and economic value areas that need to be addressed by researchers in the field of social entrepreneurship.

- Liñán and Fayolle (2015) conducted a systematic literature review on entrepreneurial intentions. A total of 409 papers related to entrepreneurial intentions published between 2004 to 2013 (inclusive) has been analysed. Out of the 409 papers analysed, they found 17 papers are a focus on the intentions toward very specific entrepreneurial activities. On the basis of this analysis, they identified two themes that seem to be gaining momentum: social and sustainable entrepreneurship intentions. Liñán and Fayolle, (2015) further stated that social entrepreneurship intentions is undoubtedly the most developed subject and should be explored further.

Based on the above-mentioned observations and existing gaps in the literature, this study has tried to identify the critical antecedents affecting the formation of social entrepreneurial intentions. The select antecedents taken in the present study are **personality traits** (creativity, pro-activity, innovativeness, risk-taking propensity, emotional intelligence and locus of control), **pro-social personality traits** as empathy, moral obligation and sense of responsibility), **social factors** (entrepreneurial experience and entrepreneurial educational background) and **enablers** (self-efficacy and social support). The theory of planned behaviour is taken as a research framework to develop the conceptual model for the present study. Moreover, the present study is also aimed to validate the derived model.

2.12 Concluding Remarks

The literature review has helped to understand the characteristics of social entrepreneurship, the in-depth state of the knowledge about the issues and present work done in the field of social entrepreneurial intentions. This has helped the researcher to identify the gaps in the existing literature and motivated to take up the further research and fill the gaps and the issues identified as mentioned above. The next chapter describes the proposed research framework and hypotheses.

Chapter 3

PROPOSED RESEARCH FRAMEWORK AND HYPOTHESES

3.1 Introduction

From the review of the literature presented in the previous chapter, it is clear that Indian society has also identified the importance of social entrepreneurship although the level of activities related to social entrepreneurship is much lower than the desired level. According to the Planning Commission (2012), the aim of planned development during the next few years is to stimulate socially and ecologically sustainable and equitable growth, but it stays far away from the reality of what is implemented by the state administration.

The lower level of social entrepreneurship is a “problem” for Indian society, as the country is not able to explore an innovative way to nurture the citizens. Generally speaking, entrepreneurship is beneficial for the society as it results in innovations, providing employment and leading to economic flourishing (Schumpeter, 1936). If accepted from this point of view social entrepreneurship is favourable to the whole society. It also addresses social issues which the government overlooks. In spite of its necessity, the present day situation of social entrepreneurship in India is highly discouraging. This invokes the obvious question: *how can the level of social entrepreneurship in India be increased?* According to Krueger (2003), entrepreneurship can only flourish if the entrepreneurs evolve in terms of both quality and quantity, which is possible only when there is an upsurge of entrepreneurial thinking. Hence, avoiding the comparison of India to other nations, this study tries to find an answer to the previously mentioned question and centres its attention on the creation of social

entrepreneurship. We studied this in an Indian context. As social entrepreneurship research is still young, there is a lack of already established theories or models on which we can base international comparative research. This study carves its niche at this point and presents itself as the very first step. It follows a *theory-based* approach to social entrepreneurship and aims at constructing a model.

Theoretically, only little has been known about the cause(s) of entrepreneurial action (Krueger *et al.*, 2008), especially social entrepreneurial action. The stage before venture creation is crucial in predicting the event of venture formation (Scheiner, 2009). According to Krueger (2000) “*If we are interested in studying new ventures, then we need to understand the processes that lead up to their initiation*”. The scholars often exploit the concept of intentions formation while analysing the stages leading an individual towards becoming an entrepreneur. The same approach is adopted to investigate of social entrepreneurship for this thesis.

This thesis aims at developing a comprehensive social entrepreneurship intentions framework. It identifies the core antecedents influencing an individual to become social entrepreneurs. Though an empirical research is conducted solely in an Indian setting, yet the applicability can and should be tested in developing countries.

In this chapter, the proposed model has been described, the hypotheses intended to test for have been outlined. The model which has been described in this chapter outlines the understanding of those attributes that influence social entrepreneurial intentions.

3.1.1 Importance of Focus on Social Entrepreneurial Intentions (SEI)

The theory of planned behaviour states that the individual behaviour is predictable from its consequent intentions (Ajzen and Fishbein, 1970). Intentions formation has been described in varying ways by several researchers. According to Bird (1998), it's a state of mind that motivates the person towards a particular goal or course of action. In

another view, intentions can be considered as a precondition that governs planned behaviour (Souitaris *et al.*, 2007). Krueger (1994) stated that “Entrepreneurial intentions can be defined as the commitment of a person towards some future behaviour, which is projected towards starting, a business or an organisation”. Though the intentions’ definition shows variance among the researchers all the studies stressed upon the significance of intentions as one of the most important factors in predicting planned behaviour (Krueger and Brazeal, 1994).

Social entrepreneurial intentions can be deemed as a psychological behaviour of human beings that persuades them to gather knowledge, perceive ideas and execute social business plans to become a social entrepreneur (Mair et al., 2006).

Mair and Noboa (2003) raised an important question that “what prerequisites are contributing to or even essential for people to act as social entrepreneurs?” Although few efforts were made by researchers to answer this question, this question left unanswered by social entrepreneurship researchers to date (Krueger and Kickul, 2006). The traditional views of looking the phenomena of social entrepreneurship as socially oriented behaviour to stem simply from a sense of altruism, but various researchers disagree with this thought and argue against this idea. Mair and Marti (2006) emphasised ethical motives and personal fulfilment for the development of social enterprise while Dees (1998) name total of six potential motivations for social entrepreneurship altruism, community engagement, generosity, compassion/sympathy, leisure, and volunteerism. Choi and Majumdar (2014) argue that altruism and egoism should both foster businesses. So which are the cognitive elements, whether altruistic or not, which form social entrepreneurial intentions?

Thus, researchers concluded that social entrepreneurial intentions is an indispensable tendency for social enterprise creation and this is turning out to be an evolving research area attracting considerable academic attention. The territory of the

configuration of social entrepreneurial intentions has long been barely touched. Ziegler (2009) clarified that detailed study of the prerequisites contributing to motivate people to become social entrepreneurs is profoundly lacking (Ziegler, 2009).

3.2 Review of Studies on Social Entrepreneurial Intentions

The first attempt to develop a model that can capture social entrepreneurial intentions formation was done by Mair and Noboa (2006). In their model, they used individual variables to measure intentions. Mair and Noboa (2006) in their model of social entrepreneurial intentions suggested that intentions to start social enterprise develop from perception to desirability, which was affected by cognitive-emotional construct consisting of empathy as an emotional factor and moral judgment as a cognitive factor; and perceived feasibility was affected by enablers consisting of self-efficacy and Social Support (Mair and Martí, 2006). Figure 3.1 shows Mair and Noboa (2006) social entrepreneurial intentions model.

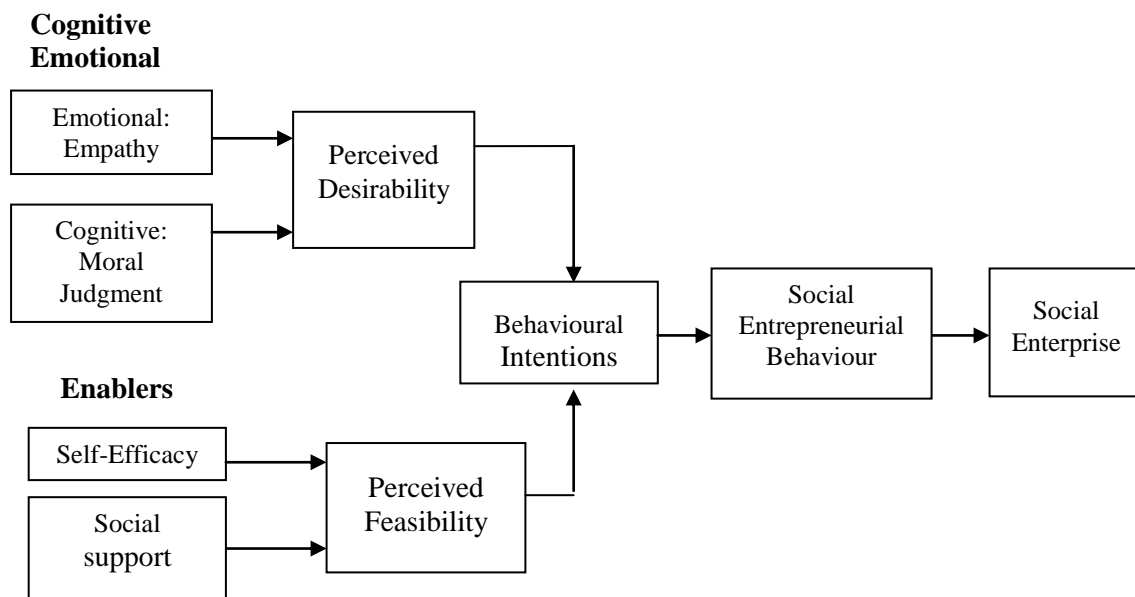


Figure 3.1: Social entrepreneurship Intentions Model (Mair and Noboa, 2006)

This model is considered as the first model that was specifically proposed to measure social entrepreneurial intentions. In this model, Mair and Noboa adopted

classical previously tested Shapero's model of the entrepreneurial event and expanded by adding constructs of perceived desirability and perceived feasibility. Antecedents that distinguish this model from traditional entrepreneurial models are empathy and moral judgment. However, researchers cannot deny the fact that everyone who is exhibiting with empathy and moral judgment becomes a social entrepreneur. But the certain level of empathy and moral judgment is required to trigger social entrepreneurial intentions process (Mair and Martí, 2006). After that, some attempts were made by researchers in predicting social entrepreneurial intentions formation. In the next paragraphs, we discuss other important intentions studies' conducted in the field of social entrepreneurship.

Van *et al.*, (2009) tried to test social intentions formation. In their study, they suggested three critical catalysts that can enhance the effectiveness of any social enterprise. These catalysts were defined as effectual logic, enhanced legitimacy through appropriate reporting metrics, and information technology (IT). They further described that these three catalysts could potentially act as enablers to predict social entrepreneurial intentions (Vansandt *et al.*, 2009). Nga and Shamuganathan (2010) conducted a research study in Malaysia. They tested the effect of personality traits in predicting the characteristics of social entrepreneurship on a sample of 181 Malaysian students (Nga and Shamuganathan, 2010). The big five personality theory used in this paper did not really prove useful in order to predict characteristics of the social entrepreneurs.

Kirby and Ibrahim (2011) carried out a research study in order to find out the role of social entrepreneurial education in Egypt. The basic highlight of this research study is that they tried to find out awareness of social entrepreneurship amongst Egyptian students so that policymakers could modify their policies to encourage students to opt for social entrepreneurship as a career choice. A sample of 183 students was used and the

result of the study found out that Egyptian students do not have complete and appropriate knowledge about social entrepreneurship.

In the thrust of identifying the antecedent that motivates individuals to opt for social entrepreneurship Shumate *et al.*, (2014) conducted a qualitative research study. In-depth interviews with 20 social entrepreneurs suggested that there are two possible paths that lead to the social entrepreneurship. First one is “activist path” and the second one is “business path”. The finding of this research study suggested that both activist and business social entrepreneurs were motivated by their family background and transformative early adulthood experience which act as a moral basis to form a social start-up. Although this research study provides an interesting side by based on the “Evolutionary theory” but failed to find out that whether these antecedents directly lead to the formation of social start-ups or required some mediators that facilitate this inception.

Germak and Robinson, (2014) conducted a qualitative study to find out the motivating factors of the nascent social entrepreneurs. In-depth interviews of the 16 nascent social entrepreneurs identified five major themes viz. personal fulfilment, helping society, nonmonetary focus, achievement, orientation, and closeness to a social problem that motivates individual to start their social venture.

Belz and Binder (2015) conducted a research study to capture the broader concept of the development process of sustainable entrepreneurship. This research study is considered as the first empirical research that used triple bottom line approach to sustainable entrepreneurship. Empirical result of the study suggested that there are six phases of sustainable entrepreneurship process. These phases include recognising a social or ecological problem, recognising the social or ecological opportunity, developing a double bottom line solution, developing a triple bottom line solution, funding and forming of a sustainable enterprise and creating or entering a sustainable market. Although this study is not directly related to the antecedent of

social entrepreneurial intentions but proved very helpful in assessing what are the motivators for sustainable enterprises.

In order to find out the motivating factors of social entrepreneurial intentions, one of the recent efforts is done by Politis *et al.*, (2016). A sample of 111 postgraduate students of South-East European region was used to test the effect of personality trait theory in predicting social entrepreneurship intentions. In this research study, personality trait theory was totally rejected because it failed to predict social and commercial entrepreneurial intentions (EIs) whereas the theory of planned behaviour was proved helpful in predicting both social and commercial entrepreneurial intentions.

Hockerts' (2015, 2017) made an attempt to validate the model of Mair and Noboa (2006). He modified the model by removing the mediating variables (perceived desirability and perceived feasibility) from the model and tested the direct effect of moral obligation, entrepreneurial self-efficacy, empathy and perceived social support on social entrepreneurial intentions. Hockerts' (2015) further added construct "prior experience" in the model and the effect of prior experience was mediated by above mentioned four antecedents. He carried out this research study on three different samples and found out some positive relationship with the social entrepreneurial intentions (Hockerts, 2015).

Above discussed review cleared the point that social entrepreneurial literature dealing with the factors that lead to the development of social venture follow two different approaches. Through first qualitative approach, researchers tried to find out what are the motivating factors for social entrepreneur/nascent social entrepreneurs. And the second approach that tried to capture the pre-venture creation phase by quantitative method. This stream of researchers tried to find out what are the factors that affect social entrepreneurial intentions formation. This research study also focuses on the intentions formation process of social enterprise creation.

Although few research studies tried to empirically test the effect of antecedents on social entrepreneurial intentions these studies are mere replications of each other. The major limitations of Ernst (2011) research study were that in spite of the fact they measure the intentions of management graduates of German universities but they fail to capture the type of support they will receive from their university if they opt for social entrepreneurship as a career. This is in accordance with the findings of David (2011) that university support can prove an important tool in boosting social activities among students at the university level (Kirby and Ibrahim, 2011). Limitation of Forster and Grichnik (2013) model is that they used corporate social volunteers to predict social intentions formation process. But comparing corporate volunteers with social entrepreneurship is not advisable (Hockerts, 2015).

3.3 Development of theory-based model of social entrepreneurial intentions formation for Present study

In this section, development of social entrepreneurial intentions is discussed in detail. It includes identified critical antecedents for intentions formation as well as casual links between antecedents and constructs. Based on the hypotheses derived from the literature review and preliminary study, a model that depicted the research questions was developed. As suggested by Walter (2008) suggests, the proposed model can be utilised to connect and related perceptions of different theories by developing different elements of the proposed model on different fields of research. As discussed above, the foundation of this derived model is based on the theory of planned behaviour. Therefore, first, the constructs of the theory of planned behaviour are adapted to the target behaviour of becoming a social entrepreneur. In the later stage, critical antecedents of the model are identified. These are identified by evaluating various research studies from business entrepreneurship and related fields of research.

These are developed by assessing insights from business entrepreneurship and related fields of research. The causal links between these new antecedents and TPB-constructs are formulated in the form of further hypotheses. Then, individual control variables are suggested. Finally, the model developed of social entrepreneurial intentions formation is presented.

3.3.1 The Theory of Planned Behaviour Adapted to Social Entrepreneurial Intentions Formation

In the field of entrepreneurial intentions research, one of the most adopted and used models is Ajzen's theory of planned behaviour (TPB) (Engle *et al.*, 2010). TPB is based on the idea that intentions to carry out specific behaviour are being shaped by person's attitude toward behaviour and their ability to carried out that behaviour (Ajzen, 1991). He also mentioned that these intentions were the outcome of attitudes developed through past experience and individual characteristics (Ajzen, 1996). According to Ajzen, there are three determinants of intentions to act. These are:

1. Attitude toward the behaviour (the degree to which a person has a good or bad assessment or evaluation of the behaviour in question);
2. Subjective norm (the perceived social pressure to execute or not to execute the behaviour); and
3. Perceived behavioural control (the individual's perception of how easy or hard performance of the behaviour is going to be.)

Although the theory of planned behaviour was initially developed in the field of psychology due to the wider scope and extensive applicability, TPB is very well adapted and used in various other fields (Iakovleva and Kolvereid, 2009; Krueger, 1993; Krueger and Carsrud, 1993; M., 2013). One of the characteristics that make TPB very attractive is that standard model of TPB can be adapted and changed according to the specific domain of the study (Krueger *et al.*, 2000). Ajzen (1996) himself emphasised regarding the

expansion of the classical model by adding antecedents of attitude toward the behaviour, perceived behavioural control and subjective norms in order to provide additional insights (Ajzen, 1991).

Existing factors can be modified according to study's scope and nature, supplementary factors can be added, and causal links can be tailored (Iakovleva and Kolvereid, 2009). Modification in the standard TPB model is an essential prerequisite because nature and scope of each study are different (Kolvereid, 1996). As pointed by researchers these antecedents only effect intentions indirectly (Krueger and Carsrud, 1993). The classical model of the theory of planned behaviour is shown in Figure 3.2.

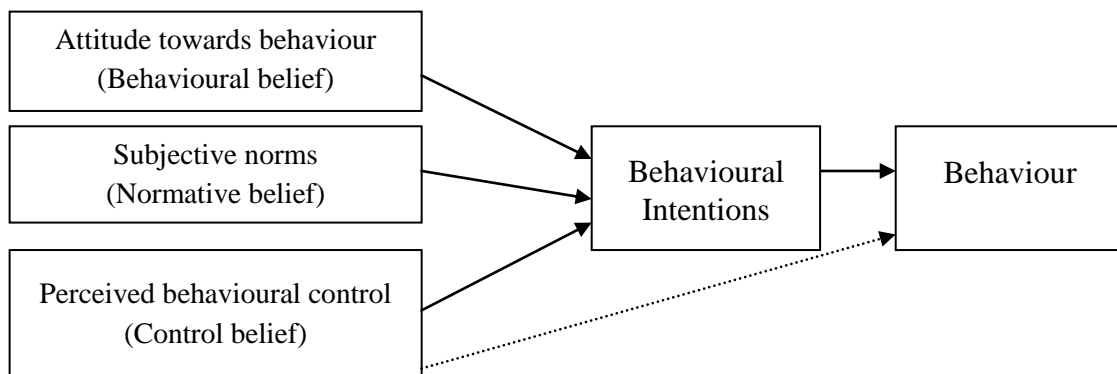


Figure 3.2: Classical Model of Theory of Planned Behaviour (Ajzen, 1991)

Based on the above-discussed theory of planned behaviour, it's constructed in the context of social entrepreneurship and their relationship is discussed in next section.

3.4 Social Entrepreneurial Intentions (SEI)

According to the theory of planned behaviour, the individual behaviour could be predicted from its consequent intentions (Ajzen and Fishbein, 1970). Researchers have described intentions in many different ways. Bird (1998) defines intentions as a state of mind that motivates a person toward a certain goal or a path (Bird, 1998). Intentions can be considered as a precondition that governs planned behaviour (Souitaris *et al.*, 2007). According to Krueger (1994), "Entrepreneurial intentions can be defined as the

commitment of a person towards some future behaviour, which is projected toward starting, a business or an organisation”.

Various research studies emphasise the importance of intentions as one of the crucial constructs in predicting planned behaviour (Krueger and Brazeal, 1994). The entrepreneurial intentions are thus considered as an indispensable tendency towards formation of an enterprise and are also an emerging research area that attracts a substantial number of research studies. Ziegler (2009) mentioned that what prerequisites were contributing to motivate people to act as a social entrepreneur is yet to be fully explored (Ziegler, 2009).

3.4.1 Attitude towards becoming a social entrepreneur (ATB)

An attitude is a propensity to act toward or against something in the environment which thereby become positive or negative value (Bogardus, 1931). Attitudes are based on the summation of the individual's beliefs and the process of evaluations associated with those beliefs. Appolloni and Gaddam (2009) suggested that behaviour of an individual depends on person's beliefs and attitudes and those attitudes and beliefs play a crucial role in shaping individual's action. Ajzen (1991) defined attitude toward behaviour a degree to which a person has a good or a bad assessment or evaluation of the behaviour in question. ATB refers one's personal pull towards particular target behaviour. Rossmann (2010) defined beliefs and perceptions regarding the personal desirability of performing a behaviour, that is in turn related to expectations regarding the personal impact of outcomes resulting from that behaviour.

The term attitude toward the behaviour is associated with the theory of planned behaviour. Although the theory of planned behaviour was initially developed in the field of psychology due to its wider scope and extensive applicability, TPB is very well adapted and used in various other fields (Iakovleva and Kolvereid, 2009; Krueger, 1993; Krueger and Carsrud, 1993; M., 2013). One of the characteristics that make TPB very

attractive is that standard model of TPB can be adapted and changed according to the specific domain of the study (Krueger *et al.*, 2000).

Ajzen (1996) himself emphasised the expansion of the classical model by adding antecedents of ATB, perceived behavioural control and subjective norms in order to provide additional insights (Ajzen, 1991). Ajzen (1991) stated that actions are followed by conscious judgments to act in a certain way. According to him, there are three determinants of intentions to act. These are, “attitude toward the behaviour”, “subjective norm”; and “perceived behavioural control”. The most sought out construct of intentions in the TPB is the attitude toward behaviour (ATB). Attitude is different from the traits with respect to the evaluative nature towards certain specific intentions (Armitage and Conner, 2001). Iakovleva and Kolvereid (2009) highlighted the fact that attitude toward behaviour has a direct and a strong positive significant effect on entrepreneurial intentions. Therefore, efforts should be made towards changing personal attitudes of the person (Vinogradov *et al.*, 2013).

In the entrepreneurial intentions studies, ATB proved to be an important factor that affects intentions in a positive manner (Ericsson 1998; Koçoğlu and Hassan 2013). In many studies, ATB strong predictor of entrepreneurial intentions followed by perceived behavioural control (Krueger and Brazeal, 1994). According to the research study conducted by Zampetakis *et al.*, (2009) attitudes have a strong influence on entrepreneurial intentions, hence attitude is, in fact, a deterministic antecedent for intentions. This highlights that every digression in attitude is directly leading to a digression of the same degree of entrepreneurial intentions. Krueger *et al.*, (2000) found that attitude toward behaviour showed a strong positive relationship with the intentions. Attitude toward entrepreneurship affects the propensity of a person to opt for entrepreneurship and the social support entrepreneurs receive when going for social entrepreneurship as a career choice (Hatten and Ruhland, 1995). Empirical studies

suggested that positive attitude toward entrepreneurship lead to high levels of entrepreneurship (Lee and Wong, 2003). Researchers highlighted that attitudes toward entrepreneurship are affected by a variety of factors like education and personality traits. According to Kolvereid and Isaksen (2006), a positive attitude toward becoming an entrepreneur and an ability to start one's own venture predicts entrepreneurial intentions. Carsuard and Brannback (2011) revealed that if a person has a positive attitude toward starting his/her own venture which is aligned with his/her overall aim in life then most probably, he/she will form entrepreneurial intentions.

In the field of social entrepreneurship Ernst (2011) tests the effect of attitude toward becoming a social entrepreneur on social entrepreneurial intentions. She found a strong positive significant relationship between people desirability to be a social entrepreneur and social entrepreneurial intentions. As suggested by Ernst (2011), we also used ATB as "attitude toward becoming a social entrepreneur" i.e. the degree to which person possesses positive or negative assessment toward social entrepreneurship as a career option. Based on the above discussion we next propose the following hypothesis.

H1.1: Attitude towards becoming a social entrepreneur has a positive impact on social entrepreneurial intentions.

3.4.2 Subjective norms (SN) - (Normative belief)

SN refers to the social pressure experienced in the way of executing or choosing not to execute the behaviour and the collective term 'social pressure' comprises of pressure from the family, friends and other significant people like colleagues. SN is defined as "the person's perception of social pressure to perform or not to perform the behaviour under consideration" (Ajzen and Fishbein, 1977). By perceptions, he meant the understanding of how the people nearest to him – partner, family, friends, and sometimes fellow students (in the case of student's population) – would want him to follow a particular course or behave in a particular situation. Basically Normative beliefs are

whether the close family members, friends and colleagues will approve their decision for a specific behaviour (Ajzen 1991) which develops the perceived social pressure felt by individuals towards certain choices and behaviours.

In addition to the potential of these various norms, an individual's understanding and likeliness to follow such norms decide their significance on choices or behaviours. Thus, we can see normative beliefs play two significant roles. Firstly, normative beliefs contributed to forecasting of other variables (subjective norm, intentions, and behaviour), and secondly, for those who tend to perform intercessions, the calculation of normative beliefs provides information regarding the impactful points where intercession efforts should be focused on. The efforts should be centred on those normative beliefs which the population of importance has and that are superior predictors of subjective norm (and behavioural intentions and behaviour) rather considering beliefs that are not extensive in the population of interest or that fail to predict subjective norms efficiently. The research community shows a unanimous agreement towards the societal pressure in actuating certain behaviour, but their opinions differ regarding the actual source of pressure (Liñán, 2004).

The subjective norms have always been considered to be the most conflicting element in the theory of planned behaviour. They were found to be the weak predictor of entrepreneurial intentions by the meta-analysis study as Armitage and Conner (2001). Many scholars have confronted subjective norm mentioning its significance in foreseeing entrepreneurial intentions. Some of them bear the opinion that it is irrelevant in predicting entrepreneurial intentions (Krueger, 1993; Liñán and Chen, 2009; Liñán, 2004; Reitan, 2004) while there are also other researchers whose findings indicate subjective norm to be impactful (Kolvereid, 1996a; Kolvereid and Tkacheve, 1999; Kolveried and Isaksen, 2006; Yordanova and Tarrazon, 2010). It's interesting to note

that some researchers do not consider this variable at all in measuring entrepreneurial intentions (Kennedy, 2003; Liñán and Urbano, 2007).

There exist a number of factors that can influence how subjective norm envisage entrepreneurial intentions. Thus it's hard to get any transparent answer to how accurately and precisely subjective norm predicts the intentions to be an entrepreneur. According to Liñán (2004), future analysis should aim to solve this confusion regarding subjective norm and entrepreneurial intentions. At this point, this study perceives subjective norms (normative belief) on becoming a social entrepreneur as the perception that the immediate social surrounding would provide approval to the subject becoming a social entrepreneur. Based on the above discussion we next propose the following hypothesis.

H1. 2: Subjective Norms (Normative belief) have a positive impact on social entrepreneurial intentions.

3.4.3 Perceived Behavioural Control (PBC)

PBC is the individual belief about his/her ability for carrying out the certain task (Armitage and Conner, 2001). Hence, PBC encompasses the evaluation of the “do-ability” of the target action (Ajzen and Thomas, 1986). In entrepreneurial research, PBC is considered as one of the strongest predictors of intentions. Liñán and Chen (2009) define PBC as “the perception of the ease or difficulty of becoming an entrepreneur” (Liñán and Chen, 2009). In respect of this definition, the researcher used PBC as ease or difficulty in becoming the social entrepreneur.

In entrepreneurial intentions studies, there is an ongoing debate about the fact that self-efficacy and perceived behaviour control are same as they both measure the ability to carrying out a particular activity. In the similar fashion, Ajzen (2002) consider self-efficacy as the subset of perceived behavioural control. In this research, study self-efficacy is not considered as equivalent to perceived behavioural control. But for the

purpose of this study, self-efficacy identified as task-specific (Krueger and Dickson 1994) whereas PBC as a broader concept. As defined by Ajzen (2002) perceived behavioural control as the perceived acceptance or difficulty of performing the behaviour, therefore, it includes various activities required to perform that task. Hence in this study self-efficacy and perceived behavioural control are used and measured separately.

Therefore following hypothesis formed on the basis of above explanation:

H1.3: Perceived behavioural control has a positive impact on social entrepreneurial intentions.

3.5 Antecedents of Social Entrepreneurial Intentions

From the previous discussion, it is evident that intentions models did not validate the actual behaviour. Instead, they focused on the factors which lead to an impact intentions. Researchers of entrepreneurship proposed a number of factors that influence entrepreneurial intentions (Bird, 1988; Liñán, Rodríguez-cohard, and Rueda-cantuche, 2011; Morris *et al.*, 2001). These factors or antecedents can be classified as cognitive, motivational/ non-motivational or situational (Liñán and Chen, 2009; Shane *et al.*, 2003; Venkataraman, 2000). A short summary of a selected research study presented in Table 3.1.

Table 3.1: Select Studies Reviewed on Antecedents to Entrepreneurial Intentions

Author (year)	Basic model	Antecedents	Dependent Variables	Unit of analysis	Findings
Shane (1996)	TPB	<ul style="list-style-type: none"> • Family background • Gender • Self-employment • Experience 	Attitude Subjective norm Perceived behavioural control	Michigan business school students	Self-employment experience, gender, and family background Only indirectly influence self-employment intentions through their effect on attitude, subjective norm and perceived behavioural control
Tkachev (1999)	TPB	<ul style="list-style-type: none"> • Family background • Gender • Self- 	Attitude Subjective norm Perceived behavioural	Russian university students	Attitude, subjective norm and perceived behavioural control determine employment status choice intentions among Russian students, not tracking

Author (year)	Basic model	Antecedents	Dependent Variables	Unit of analysis	Findings
		employment experience	control		or demographic
Veciana <i>et al.</i> , (2005)	TPB and SEE	<ul style="list-style-type: none"> • Gender • Entrepreneurs among relatives 	New venture feasibility New venture desirability	Puerto Rico and Catalonia university students	The relationship between demographic variables and entrepreneurial intention are not the same with different country students
Linan and Chen (2006)	TPB	<ul style="list-style-type: none"> • Role model • Self-employment experience • Work experience Personal data(age, gender)	Personal attraction Social Norms Self-efficacy	Spanish and Taiwan university students	Demographic variables except gender have relatively few significantly effects over the antecedents of the entrepreneurial intention
Segal <i>et al.</i> (2005)	SEE	<ul style="list-style-type: none"> • Self-efficacy • Tolerance for risk • desirability for self-employment 		USA undergraduate business students	Net desirability for self-employment is determinant factors for entrepreneurial intention
Souitaris <i>et al.</i> , (2007)	TPB	<ul style="list-style-type: none"> • Entrepreneurship programme 	Attitude Subjective norm Perceived behavioural control	London, UK and Grenoble, France University students	Entrepreneurship programmes are a source of trigger events, which inspire students (arouse emotions and change mindsets)
Luthje and Franke (2010)	TPB	<ul style="list-style-type: none"> • Risk • Locus • Barriers • Support 	Attitude Subjective norm Perceived behavioural control	512 students at the MIT School of Engineering	Personality traits have a strong impact on the attitude towards self-employment. The entrepreneurial attitude is strongly linked with the intention to start a new venture. The students' personality, therefore, shows an indirect effect on intentions. Furthermore, the entrepreneurial intent is directly affected by perceived barriers and support factors in the entrepreneurship-related context. The findings have important implications for policymakers inside and outside universities.
Chau You Yan Rona (2011)	TPB and SEE	<ul style="list-style-type: none"> • self-efficacy, • innovativeness, • the social network, • risk-taking propensity • Cultural intelligence(CQ) 	Attitude Subjective norm Perceived behavioural control	Three major public universities in Hong Kong(133 students).	Research studies show that Self-efficacy, social network and risk-taking propensity are crucial for starting business. Innovativeness, however, did not show the effect on entrepreneurship intentions. The major finding showed in this study is that CQ strengthened the effect of self-

Author (year)	Basic model	Antecedents	Dependent Variables	Unit of analysis	Findings
					efficacy on entrepreneurship intentions.
Leonidas <i>et al.</i> , (2011)	TPB	<ul style="list-style-type: none"> • emotional intelligence (EI), • creativity • proactivity 	attitudes towards entrepreneurship and Entrepreneurial intent.	(280) business, engineering and science students from three Greek universities.	Results provide strong support for the proposition that students' creativity and proactivity fully mediate the positive effect of trait EI on attitudes towards entrepreneurship. Attitudes towards entrepreneurship fully mediated the effects of creativity and proactivity on entrepreneurial intent. The paper demonstrates that EI is positively related to three important antecedents of entrepreneurial intentions
Oosterbeek, van Praag, Ijsselstein (2011)	TPB	<ul style="list-style-type: none"> • Entrepreneurship education program 	students' entrepreneurship skills and motivation	104 school students	Effect on students' self-assessed entrepreneurial skills is insignificant and the effect on the intention to become an entrepreneur is negative.
Riccardo Fini <i>et al.</i> (2011)	TPB	<ul style="list-style-type: none"> • Individual skills • Psychological characteristics • Environmental support • Environmental influence 	Attitude Subjective norm Perceived behavioural control	Sample of 200 entrepreneurs, founders of 133 new-technology-based firms	This study shows the positive (indirect) influence of both psychological characteristics and individual skills on intention. results show that environmental support fails to predict entrepreneurial intention. This suggests that the support coming from the government, context and universities is not relevant in shaping entrepreneurial intentions.
Marco van Gelderen <i>et al.</i> , (2011)	TPB	<ul style="list-style-type: none"> • Autonomy • Wealth • Challenge • Need for financial security • Workload avoidance. • Perseverance • Creativity • Entrepreneurial alertness • Self-efficacy 	Attitude Subjective norm Perceived behavioural control	Study among samples of undergraduate students of business administration at four different universities (total n= 1225). components of the TPB.	The results show that the two most important variables to explain entrepreneurial intentions are entrepreneurial alertness and the importance attached to financial security. This study provides evidence for the usefulness of the theory of planned behaviour in explaining entrepreneurial intentions and adds to the literature through its detailed findings. The perceived behavioural control component of the TPB was tested by means of four variables, with entrepreneurial alertness receiving consistent support, and perseverance a consistent lack of support in explaining EI.
Nirand Arkarattana	TPB	<ul style="list-style-type: none"> • Risk perception, 	Attitude Subjective	380 participants	All components of the determinants were highly

Author (year)	Basic model	Antecedents	Dependent Variables	Unit of analysis	Findings
kul <i>et al.</i> , (2012)		<ul style="list-style-type: none"> • self-confidence, • Entrepreneurial knowledge) • entrepreneurial experience from family, • financial support from family, • family success), SN • Independence of control, • human value, and • Entrepreneurial perception 	norm Perceived behavioural control	of new Entrepreneur s Creation (NEC) program's participants.	related. The participants' attitudes toward the behaviour of venture creation were shown to have a mid-level of risk perception with the high levels of self-confidence and entrepreneurial knowledge. Similarly, the participants regarded the influences of entrepreneurial experience from family, financial support from family, and success of family to be at the mid-level. By the same token, the participants' perceived behaviour control showed the high levels of independence of control and entrepreneurial perception with a very high level of human value. The highest value of human value demonstrates the need for success and lifetime security of the study participants.
Sizong Wu <i>et al.</i> , (2012)	TPB	<ul style="list-style-type: none"> • Educational Major • Academic major • Entrepreneurship education • Academic achievements 	Attitude Subjective norm Perceived behavioural control	Data were collected from (162)students of Tongji University in Shanghai, China.	In this study, based on the TPB, the path analysis shows that Chinese university students' entrepreneurial intentions can be explained by the combination of personal attitude and perceived behavioural control. Subjective norm does not contribute significantly to the prediction of entrepreneurial intentions of Chinese university students. Educational levels will influence entrepreneurial intentions through its effect on personal attitude.
Zampetakis (2012)	TPB	<ul style="list-style-type: none"> • emotional intelligence (EI), • creativity, • proactivity 	Attitudes towards entrepreneurship and entrepreneurial intent.	A sample of 280 business, engineering and science students were collected across three Greek universities.	Results provide strong support for the proposition that students' creativity and proactivity fully mediate the positive effect of trait EI on attitudes towards entrepreneurship. Attitudes towards entrepreneurship fully mediated the effects of creativity and proactivity on entrepreneurial intent. The paper demonstrates that EI is positively related to three important antecedents of entrepreneurial intentions and provides the literature with another important piece of the puzzle concerning

Author (year)	Basic model	Antecedents	Dependent Variables	Unit of analysis	Findings
					entrepreneurial motivation
Ferreira (2012)	TPB	<ul style="list-style-type: none"> • Internal locus of control; • The propensity to take the risk. • Self-confidence. • Need for achievement, • tolerance of ambiguity • Innovativeness. 	Attitude Subjective norm Perceived behavioural control	This research was developed involving a sample of secondary students.(150	The results show that need for achievement, self-confidence, and personal attitude positively affect entrepreneurial intention. Furthermore, subjective norms and personal attitude affect perceived behavioural control. These findings could have a significant impact on knowledge of the contributions of behavioural and psychological theories to the entrepreneurial intention. This is one of the first studies to provide evidence of the entrepreneurial intention explained by several constructs related to psychological and behavioural characteristics in a 14-15-year-old student population.

The identification of appropriate antecedents matching the criteria above is made based on literature review. First, the scholars consider the social entrepreneurship findings. Almost all the studies have done so far is anecdotal and not empirical and quantitative, hence studies on entrepreneurial intentions are assessed to learn from prior results in related are. As social entrepreneurship is a form of entrepreneurship, research in this area derives inspiration from past business entrepreneurship studies, and similar inspirations have been obtained to develop this model. But a significant point to note is that social entrepreneurship specifics are developed, and new emphases are placed. Findings from studies in related fields are included when required. The following categories are selected for expanding the model of social entrepreneurial intentions formation.

1. **Personality Traits** (innovativeness, creativity, proactivity, internal locus of control, and risk-taking propensity)
2. **Prosocial Personality Traits** (Empathy, Moral obligation, emotional intelligence and social responsibility)
3. **Social Factors** (Social/entrepreneurial educational background and previous experience related to social work).
4. **Enablers** (Self-efficacy, Perceived social support)

Figure 3.3 depicts the proposed social entrepreneurship intentions model derived and taken for this study. The specific causal links are established along with the discussion on each antecedent.

The following part of the chapter describes the importance and motivation of taking each of the antecedents as personality traits, prosocial personality traits, social factors and enablers.

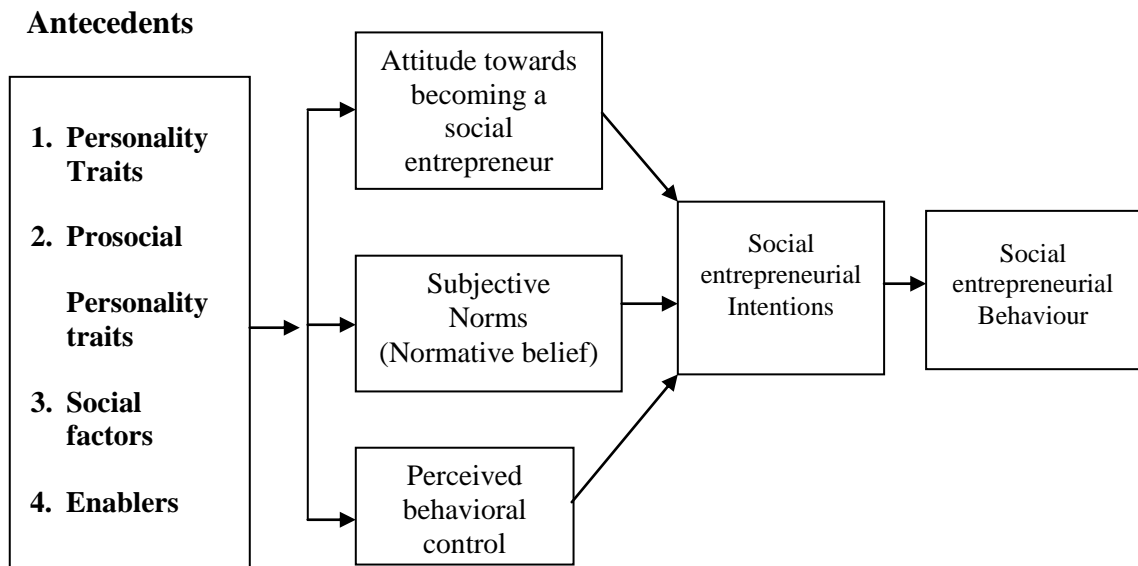


Figure 3.3: Proposed Social entrepreneurship Intentions Model

3.5.1 Personality Traits

Entrepreneurial personality has drawn much discussion and insight in studies underlining the relationships between personality traits and entrepreneurial intentions. So the social entrepreneurial personality is considered as a precursor in the model of social entrepreneurial intentions taken in the present study.

The entrepreneurship study follows three approaches: functional, personality and behaviour. The functional approach theorises the interaction between the entrepreneur and his/her environment; the second concentrates on the unique features of entrepreneurs; while the third focuses on the actions of the entrepreneur (Cope, 2005).

This thesis considers the second approach because it concerns the personality traits of social entrepreneurs.

The academic interest in the role of the personality in entrepreneurship has shown up after a gap of almost two decades. According to the most current research, the personalities of the entrepreneurs' are notably different from those of other groups, such as managers (Zhao *et al.*, 2010). The significance of learning about the entrepreneurial personality is stressed upon by Johnson (1990) according to whom the study of the individual's role including his or her psychological profile is crucial if he executes the entrepreneurial process. Following this, Shane *et al.*, (2003) proposed the entrepreneurial process to be dependent on the decisions of entrepreneurs, the decisions being influenced by their personal characteristics. Thus, personality is fundamental towards realising the intentions to set off for an enterprise.

Burger (2006) stated that personality is an interpersonal process and is a stable pattern of behaviour intrinsic to the individual himself. Another definition is put forward by Gordon Allport (1967) which says that personality is a "dynamic organisation inherent in an individual who possesses psychological systems determining original patterns while adapting to its environment (Robbins, 2012). Again, Mount *et al.*, (2005) defined personality as the integrated traits determining the reasons for emotional, cognitive and behavioural patterns, bearing traces of psychological characteristics and revealing who the person is.

Researchers have exploited personality traits by explaining the commercial entrepreneurs' industrious behaviour, and the liveliness of their actions. In spite of that, only meagre research insight exists on how these traits impact the social entrepreneurs.

Till date, a considerable part of the social entrepreneurship research deals with the realm of the 'social entrepreneur' and their personality (Light, 2009; Shaw and Carter, 2005) which extends from anecdotal tales about social entrepreneurs, describing

their remarkable character (e.g., Bornstein, 2004; Elkington and Hartigan, 2008; Frances, 2008), to apparently casual lists of attributes within related scientific texts (e.g., Leadbeater, 1997; Martin and Osberg, 2007; Nicholls, 2006a), to studies particularly aimed at gaining deeper insight on the significant traits of social entrepreneurs (e.g., Barendsen and Gardner, 2004; Winkler, 2008). Hence it can be stated that existing research emphasises that their personality is something exceptional and unnoticed in another area.

A large amount of data of diverse qualities is available about the social entrepreneurial personality, and the majority of texts describing traits appear as a seemingly random list of attributes. The studies which have focused mainly personality or traits of social entrepreneurs are of special significance to find the contributors to the model in this study. As this research is still in its youth, empirical studies are lacking. A brief review of these studies is presented in the following paragraphs.

To enhance the tendency of social entrepreneurship, Leadbeater (1997) carried out a qualitative research where he exploited case studies of seven social entrepreneurs and aimed at distinguishing personality traits of this breed. Though this study lacks any empirical validation and conclusion, it underlines three significant aspects of social entrepreneur personality. Leadbeater defined a social entrepreneur as a discrete person nourishing a strong desire to change the world, and he put forward three adjectives for them i.e. entrepreneurial, innovative and transformative. This study, therefore, does not provide a comprehensive insight into what is known as a social entrepreneurial personality.

Barendsen and Gardner (2004) conducted a qualitative study to determine the personality traits that distinguish social entrepreneurs from profit-targeting entrepreneurs. To provide an answer to this question Gartner (1989) employed the sample of social entrepreneurs, business entrepreneurs and service professionals. As the

major conclusion of her study, Gartner (1989) states that social entrepreneurs are analogous to service professionals in a sense they feel “outsider,” but the quality of providing an innovative and thinking out of the box is just like the business entrepreneurs. She further recognised that the traits of social entrepreneurs are energetic and risk-takers. Although this research study emerged supportive in social entrepreneurship research still this research could not find out the source of these qualities.

A sample of 75 Indian social entrepreneurs was used by Vasakarla (2008). As a major conclusion, this quantitative study found that several traits like innovativeness, the need for achievement and risk-taking propensity, etc. of social entrepreneur bear similarity to that of the business entrepreneur. But the fundamental trait that brings in the dissimilarity is that social entrepreneurs sense an emotional connection towards social issues. Dreesbach (2010) carried out one of the most outstanding research in the field of social entrepreneur personality. She employed an equal number of both social and business entrepreneurs (90 each) and asked them to fulfil a questionnaire about the personality trait. The primary objective of Dreesbach’s research was to distinguish between the two players on the basis of prosocial personality traits. From this study, it was confirmed that social entrepreneurs exhibited a high level of prosocial personality in comparison to business entrepreneur.

We can reach two conclusions based on available reports and the current state of research on the social entrepreneurial personality. First, currently, there exists no single report explaining which traits make up the social entrepreneurial personality that might influence social entrepreneurial intentions. Second, the most of the personality-specific studies in social entrepreneurship (Barendsen and Gardner, 2004; Dreesbach, 2010; Light, 2009, 2011; Vasakarla, 2008, Ernst, 2011) are of the opinion that the social entrepreneurial personality is an amalgamation both an entrepreneurial and a socially

oriented personality. The construct of entrepreneurial personality is established mainly mostly based on business entrepreneurship research that has been conducted to date.

In accordance with the definition of the social entrepreneurial personality as discussed above, this study perceives entrepreneurial personality to be a combination of stable traits common to entrepreneurial actors, observed infrequently within the rest of people, leading them to act in the way they do. A number of traits are related to the entrepreneurial personality, some studies have listed more than 30 potential characteristics (Cromie, 2000). There are different kinds of ways in which researchers like to report their studies.

While some present overviews of the separate studies and the traits they studied (e.g., Scheiner, 2009), others prefer to show summarize commonly discussed traits and name studies in which they have been applied (e.g., Carland, Hoy, Boulton, and Carland, 1984; Rauch and Frese, 2007; Verzat and Bachelet, 2006; Walter, 2008). It is imperative to select the involved traits for developing the construct of entrepreneurial personality, and the mere inclusion of a single trait is not sufficient to address the complexity of the construct (Frank *et al.*, 2007). The present thesis includes personality traits (creativity, proactivity, innovativeness, risk-taking propensity, internal locus of control and emotional intelligence) described in detail in subsequent sections.

(i) Creativity (Cr)

Creativity is normally defined as the process to create something new and valuable. David Bohm (1998) in his book defined that it is very difficult to define creativity in words. Creativity is not a talent to produce out of nothing, but the capability to create new ideas/product by combining or reapplying already existing ideas (Plucker *et al.*, 2004). Creativity and innovation go hand in hand and considered as the heart of enterprise development (Hamidi *et al.*, 2008).

Entrepreneurs as compared to non-entrepreneurs possess an intellectual framework that motivates them for “thinking outside the box” to provide innovative solutions (Sternberg 2004). In similar fashion Baron (2004) highlighted the fact that entrepreneurs should be more creative as compared to others in relation to opportunity recognition. Schumpeter used the term “creative destruction” to define entrepreneurial phenomena (Schumpeter, 1942). Therefore, creativity is considered as one of the most important elements for the entrepreneurial intentions formation. Researchers like Gorman *et al.*, (1997), Feldman and Bolino (2000) and Hamidi *et al.*, (2008) found that high creativity scores positively affect the intentions formation process. Zampetakis *et al.*, (2009, 2011) in their research study proved that creativity not only affects the intentions process but also positively associated with the attitude toward choosing entrepreneurship as a career.

Creativity is an eternal part of social entrepreneur personality. Leadbeater (1997) defined social entrepreneurs as change agents that provide creative and innovative solutions to the most pressing and intractable social problems. Prabhu (1999) emphasised the fact that social entrepreneurs used creative ways to manage venture with a social mission. Similar to entrepreneurship creativity is considered as an important facet of social entrepreneurship. Ernst (2011) tested the role of creativity in predicting social entrepreneurial intentions. In her study creativity showed a strong positive significant relationship with attitude toward becoming a social entrepreneur and perceived behavioural control. Ernst (2011) suggested that creativity as an antecedent of the social entrepreneurial intentions required further investigation. Therefore, in this research study, we are testing the effect of creativity on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H2.1: Creativity has a positive impact on attitude towards becoming a social entrepreneur.

H2.2: Creativity has a positive impact on subjective norms (Normative belief).

H2.3: Creativity has a positive impact on perceived behavioural control.

(ii) Proactivity (Pro)

While discussing the proactive constituent of organisational behaviour, Bateman and Crant (1993) put forward a measure of the "proactive personality" which identifies the differences among people by the extent of their taking action to influence their environments. Proactive personalities recognise opportunities and act show initiative, take action, and persevere until they are able to generate some consequential change. In contrast, those who are not proactive display the contrasting patterns: failing to identify opportunities, they let them seize and modify things.

The proactive disposition is an inclination towards initiating and maintaining actions that can directly manipulate the surrounding environment (Bateman and Crant 1993). It has a fundamental difference from the affective traits like well-being and cognitive traits such as locus of control. To put in the words of Buss and Finn (1987), proactivity can be considered as an instrumental trait because it is part of a class of behaviours influencing the environment. A person, environment, and behaviour continuously influence each other (Bandura 1986) leading to a very dynamic interaction among the three (Magnusson and Endler 1977). The psychology and organisational behaviour literature state that behaviour is controlled both internally and externally, situations being the function of the individuals concerned and vice versa (Bowers 1973; Schneider 1983). There are reciprocal causal links that exist between a person, environment, and behaviour (Bandura 1977). Accordingly, it is possible for the individuals to intentionally and directly alter their current circumstances in several ways, for example by choosing vocations for which they feel they suit the best. Hence, by interactionist theory and the behaviours associated with the proactive personality, it is

not unreasonable to state that proactive personalities may be drawn to entrepreneurial careers.

Several theoretical treatments of the entrepreneurship process have talked about this concept of a proactive orientation. While in their treatise on the social dimensions of entrepreneurial events, Shapero and Sokol (1982) discussed a tendency towards action and initiative, Krueger and his colleagues (Krueger and Brazeal 1994) incorporated the concept of "propensity to act" in their study on entrepreneurial intentions and potential. Krueger (1993b) employed the desirability of control scale (Burger 1985) as a proxy for proclivity to act; however, Krueger and Brazeal (1994) suggested that other measures of propensity might be suitable.

Social entrepreneurial studies consistently mention the appearance of this trait in social entrepreneurs. While Mort *et al.*, (2003) expressly entitle social entrepreneurs as proactive (also see Weerawardena and Mort, 2006), Peredo and McLean (2006) discuss this characteristic by saying that they take advantage of the opportunities around them. Thus, proactivity is incorporated into the construct of the entrepreneurial personality of a social entrepreneur. Therefore, in this research study, we are testing the effect of proactivity on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H3.1: Proactivity has a positive impact on attitude toward becoming a social entrepreneur.

H3.2: Proactivity has a positive impact on subjective norms (Normative belief).

H3.3: Proactivity has a positive impact on perceived behavioural control.

(iii) Innovativeness (Inno)

In spite of all the uncertainties and limitation of resources, the social entrepreneurs who are driven by a determined passion to be an agent of social change must be agile and creative

in shaping collective social solutions (Dees, 2001; Elkington and Hartigan, 2008; Shaw and Carter, 2007). Through a synergistic amalgamation of capabilities, products, processes and technology, social innovation reveals a value by establishing a platform for sustainable solutions (Auersweld, 2009; Phills *et al.*, 2008). There is an opinion that the inspiration for being an agent of social change may go against the grain of rational and traditional economic thoughts and stance as vigour for 'creative destruction' to unlock value (Hart, 2005; Jayasinghe *et al.*, 2008; Schumpeter, 1971 cited in Pittaway, 2005).

As individuals develop personal mastery in the course of the networking process which involves combination and exchange of intellectual and social capital, the innovative capabilities get developed (Littunen, 2000; Nahapiet and Ghoshal, 1998). When viewed from the perspective of a social entrepreneur, this comprises of the exploring ways to penetrate unconventional 'bottom of the pyramid markets.' These markets have been neglected by commercial entrepreneurs because of the perceived high risk without guarantying economic returns (Hart, 2005). Social entrepreneurs explore innovative processes and technologies to create a social and strategic fit for products and services to introduce them into the underdeveloped, unchartered markets (Hart and Christensen, 1992; Prahalad, 2006). As these innovative endeavours gradually empower the underprivileged markets to take part in the activities of mainstream markets, a socio-economic development with higher sustainability is achieved.

There exist a considerable number of reports which confirm that innovative character traits are always observed in social entrepreneurs (Canadian Centre for Social Entrepreneurship, 2001; Leadbeater, 1997; Mort *et al.*, 2003; Peredo and McLean, 2006; Weerawardena and Mort, 2006; Winkler, 2008) and in 1998 Dees stated that they engage in ceaseless innovation. Hence, innovativeness is incorporated as an integral element of the entrepreneurial personality of a social entrepreneur. Therefore, in this research study, we are testing the effect of innovativeness on the constructs of the theory of planned

behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H4.1: Innovativeness has a positive impact on attitude toward becoming a social entrepreneur.

H4.2: Innovativeness has a positive impact on subjective norms (Normative Belief).

H4.3: Innovativeness has a positive impact on perceived behavioural control.

(iv) Risk-Taking Propensity (RTP)

The earliest recognised entrepreneurial characteristic was risk-taking (Cantillon 1755) and later Mill (1848) described an entrepreneur as an individual who deals with all the risks for the firm. To distinguish ‘entrepreneur’ from ‘manager’ Mill incorporated the term risk-bearing. According to him (1848), entrepreneurial functions are comprised of direction, control, superintendence, and risk-bearing. Later, Schumpeter (1934) noted the creative nature and drive of the entrepreneur for developing new methods and enterprises and the inherent risks associated with this type of behaviour.

For this thesis, Brockhaus (1980) definition of risk-taking is the most relevant: “the perceived possibility of receiving the rewards associated with success of a proposed situation, which is required by an individual before he will subject himself to the consequences associated with failure, the alternative situation providing less reward as well as less severe consequence than the proposed situation.”

The Research did till today confirms a high level of risk-taking disposition in social entrepreneurs. Though no empirical work particular to this topic has yet been performed, still anecdotal studies portray the social entrepreneur as risk-friendly (Bornstein and Davis, 2010; Mort *et al.*, 2003; Peredo and McLean). It is evident from the UK GEM report 2010 that, generally social entrepreneurs do not surrender to the fear and start a venture, but still display less risk-taking propensity than business entrepreneurs

(Harding, 2006). Dees (1998b) states that the social entrepreneurs act boldly when they face challenges. Thus we can say that the potential to accept risk potential is considered as a part of the entrepreneurial personality of a social entrepreneur. Therefore, in this research study, we are testing the effect of a risk-taking propensity on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H5.1: Risk-taking propensity has a positive impact on attitude toward becoming a social entrepreneur.

H5.2: Risk-taking propensity has a positive impact on subjective norms.

H5.3: Risk-taking propensity has a positive impact on perceived behavioural control

(v) Emotional intelligence (EmIn)

Emotional intelligence first came into limelight by Thorndike in 1920 when he proposed the concept of social intelligence. According to Thorndike emotional intelligence is the ability of individuals in order to manage his/her emotions and feelings wisely (Thorndike, 1937). Later on, Gardner (1993) carried out research and came up with seven intelligence areas known as Multiple Intelligence Theory (Gardner, 2004). This area attracts the attention of various researchers from the field of sociology and psychology. The concept of emotional intelligence is divided into two schools of thought, first one is of mental ability models (Salovey and Mayer, 1990) and second one mixed approach (Gardner, 2004). Ability model of emotional intelligence is based on the concept of emotions and cognitive intelligence. The basic assumption of this is that person will recognise the capabilities of individuals that control their emotions (Salovey and Mayer, 1990). According to mental ability, models emotional intelligence is defined as capabilities related to emotions and emotional information dispensation (Mayer *et al.*, 2014). Whereas emotional intelligence defined by the mixed model is comprised of

various personal attributes like the need for achievement and flexibility that will help individuals in order to manage one's emotions and relationships (Boren, 2010).

Till date, few researchers in the field of entrepreneurship research tried to find out the effect of emotional intelligence on entrepreneurial intentions. Shepherd (2004) in his conceptual model of entrepreneurship formation blames emotional factors for the business failure. Zampetakis *et al.*, (2009) tried to find out the effect of emotional intelligence on creativity, proactivity and on attitude toward becoming an entrepreneur. Zampetakis (2009) in his study found out that emotional intelligence positively affects creativity, proactivity and play an important role in the development of the attitude.

In the field of social entrepreneurship, emotional intelligence has not been tested in order to measure intentions. For that reason, it is always good to use emotional intelligence in order to predict social entrepreneurial intentions. Therefore, in this research study, we are testing the effect of emotional intelligence on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H6.1: Emotional Intelligence has a positive impact on attitude toward becoming a social entrepreneur.

H6.2: Emotional Intelligence has a positive impact on subjective norm (Normative belief).

H6.3. Emotional Intelligence has a positive impact on perceived behavioural control.

(vi) Internal Locus of control (ILOC)

Locus of control refers to people's perception of their ability to exercise control over the environment (Gerba, 2012). People with an internal locus of control believe that their own traits or behaviour (e.g. effort) determine outcomes in life (e.g. personal successes), whereas people with an external locus of control believe that outcomes are determined by external factors (e.g. fate). Theoretically, relative to people low on internal locus of control, people high on this trait should exert more effort and persist toward acquiring

valued outcomes because they feel able to control outcomes. Greater effort and perseverance generally lead to higher performance (Bandura, 1993). Empirically, previous studies have found locus of control to be associated with (1) academic achievement (for a review see Findley and Cooper, 1983); (2) coping with organizational change (e.g. Judge *et al.*, 1999; and (3) job motivation, job performance, and career success (for a quantitative review see Judge and Bono, 2001; for a narrative review see Spector, 1982). Given that previous studies have established associations between locus of control and performance-related outcomes, it would be reasonable to expect a similar link between this trait (as exhibited by entrepreneurs) and the performance of entrepreneur-led firms. There is, in fact, some evidence for such a relationship. For example, Lee and Tsang (2001), using a sample of Chinese entrepreneurs in Singapore, found the internal locus of control to be positively related to venture growth. Therefore, in this research study, we are testing the effect of internal locus of control on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H7.1: Internal Locus of Control has a positive impact on attitude toward becoming a social entrepreneur.

H7.2: Internal Locus of Control has a positive impact on with subjective norms (Normative belief).

H7.3: Internal Locus of Control has a positive impact on perceived behavioural control.

3.5.2 Pro-Social Personality Traits

Research dealing with the factors that affect the pro-social actions of the person has a long and diversified history in the area of both personality and social psychology. In general terms, pro-social behaviour is the deliberate act determined to help other. The term pro-social personality is made up of the characteristics in that acting in a certain way in order to benefit others and society as a whole (Penner *et al.*, 2005). This phenomenon of pro-social personality attracted the attention of various researchers.

Eisenberg 2002 pointed out that pro-social personality remains constant over the time and the effect of these traits is that the person acts in the certain when the agony of others provokes them. Early research on pro-social personality traits was more focused toward finding out the reason why people engage in pro-social activities (Penner *et al.*, 2004). Researchers highlighted that pro-social personality is connected with helping, social responsibility, care orientation, consideration of others, and sympathy (Eisenberg *et al.*, 2002). In the year (1998) Penner and Finkelstein defined a pro-social personality as “*an enduring tendency to think about the welfare and rights of other people, to feel concern and empathy for them, and to act in a way that benefits them*”. Therefore, it is clear from this definition that pro-social personality is rotating around the idea of helping and benefiting others.

In social entrepreneurial traits studies, pro-social personality has been tested in only a handful of studies (Mair and Noboa, 2006; Ernst, 2011, Hockerts, 2015 and 2017). There are some prominent researchers like Penner *et al.*, (1995) and (Eisenberg *et al.*, 2002) that tried to relate this concept to the idea of entrepreneurship.

Following the aforementioned definitions of the social entrepreneurial and entrepreneurial personality, this study perceives prosocial personality as a combination of stable traits common to prosocial actors, uncommon within the rest of the population, which motivate them to act in the way they do. Keeping with Ernst’s (2011) research on prosocial personality, Bierhoff’s (1996) proposition is followed, and this thesis incorporates the dimensions of empathy, moral obligation, and social responsibility while analysing prosocial personality. Under pro-social personality traits: empathy, moral obligation and social responsibility are taken as antecedents described in subsequent sections.

(i) Empathy (Emp)

Empathy is defined as the capability to understand and share the feelings of the other people. Empathy is defined as a person's ability to access another person state of mind in particular circumstances (McDonald and Messinger, 2013). Mair and Noboa (2006) described empathy as an antecedent of attitude towards behaviour. According to social cognition theory of Bandura, Empathy can be divided into two parts viz. emotional and cognitive (Bandura, 1999). Emotional empathy deals with the emotional response that a person has towards others whereas in cognitive empathetic person imaginatively acquires the role of the other and is able to estimate the feelings and actions of others (Bandura and Bandura, 1997).

Social entrepreneurship is all about understanding the difficulties faced by other people and convert that social problem as an opportunity for the betterment of the people (Prahalad, 2009). In the literature of social entrepreneurship, empathy acquires an important place. Mair and Noboa (2006) pointed out that the empathy is a personality trait that differentiates social entrepreneur from business entrepreneurs. An empathic connection is a strong force in deciding to help someone.

Mair and Noboa (2006) used empathy as an antecedent of the perceived desirability. Perceived desirability can be understood as how attractive the idea of starting up a venture is. Whereas empathy is positively associated with the desire to help others, hence Mair and Noboa (2006) concluded that a certain level of empathy is required in order to develop perceived social venture desirability, which in turn will lead to intentions of creating a social venture. In the study of Ernst (2011), she used empathy as a pro-social personality trait that affects the social entrepreneurial intentions. In her study empathy showed a negative and insignificant relationship with the attitude and intentions. A meta-analysis conducted by Borman *et al.*, (2001) found a positive relationship between empathy and the desire to help others.

Thus, the prominent researcher like Dees (2001); Harding (2006); Forster and Grichnik (2013) identified empathy as an antecedent for social entrepreneurship. Hockerts' (2015) and (2017) also measured the effect of empathy on social entrepreneurial intentions. The findings of Heckert's study were very mixed i.e. one model showed a positive relationship with empathy whereas in other model empathy showed an insignificant relationship with the intentions. As Hockerts' (2015) and Ernst (2011) suggested that empathy as an antecedent of the social entrepreneurial intentions required further investigation. Therefore, in this research study, we use cognitive empathy i.e. capability of understanding others emotional state of mind as an antecedent (Hockerts, 2015). Therefore, in this research study, we are testing the effect of empathy on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H8.1: Empathy has a positive impact on attitude toward becoming a social entrepreneur.

H8.2: Empathy has a positive impact on with subjective norms (Normative belief).

H8.3: Empathy has a positive impact on perceived behavioural control

(ii) Moral Obligation (MO)

Moral obligation has multiple meanings. Moral obligation is a metaphysical commitment, but in the long run, it is supposed to produce something physical, like action or change. In general moral obligation is defined as the tendency of helping others within religious limits (Bryant, 2009). Initially, Fishbein used moral element along with attitude toward behaviour and subjective norms to predict intentions (Fishbein, 1967). Moral obligation in relation to social entrepreneurs is related to the extent to which social entrepreneurs are fully committed to their idea and feel morally obliged to pursue them (Beugre, 2016).

Mair and Noboa first used moral obligation in their proposed model for social entrepreneurial intentions (Mair and Noboa 2006). In their research, they suggested that the key element that differentiates social entrepreneurs from business entrepreneurs is the moral obligation. A researcher like Dave Roberts said that social entrepreneur should have high moral values (Roberts and Woods, 2000). While Hendry (2004) came up with the “bi-morality” perspective of the society according to which “we have two conflicting sets of guidelines for living.” There are individuals which are more motivated by a sense of duty towards society. In a similar fashion, social entrepreneurs are born within normal people in the urge of doing good for the betterment of the society and for the development of the nation on a whole (Thompson, 2008). Boschee (1995) mentioned that social entrepreneurs are one who can balance “moral imperatives and the profit motive” (Boschee, 1995).

For the purpose of this research study, two prominent studies that tried to find out the relationship between moral obligation and social entrepreneurial intentions are by Mair and Noboa (2006) and Hockerts (2015). In the first study conducted by Mair and Noboa (2006), they adopted moral obligation as the antecedent for social desirability. Mair and Noboa (2006) followed Kohlberg’s three-stage model of moral development. The basic issue with the Kohlberg’s model is that it is morally inclined to find out why a particular individual feels morally obliged toward something. Hockerts’ (2015) adopted Haines *et al.*, (2008) model to measure moral obligation. He considered moral obligation as a sub-process of the decision-making process that motivates individual to make a moral judgment before forming moral intentions. We have followed Hockerts’ (2015) assumption of the moral obligation. According to which moral obligation is considered as the degree to which person feels the sense of responsibility to help underprivileged people in a given situation.

Moral obligation as an antecedent is very important for the social entrepreneur as it conveys the intentions that addressing a particular social problem is the appropriate thing to do. Therefore, in this research study, we are testing the effect of moral obligation on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H9.1: Moral obligation has a positive impact on attitude toward becoming a social entrepreneur.

H9.2: Moral obligation has a positive impact on subjective norms (Normative belief).

H9.3: Moral obligation has a positive impact on perceived behavioural control.

(iii) Social Responsibility (SR)

Bierhoff (1996) defined social responsibility as the characteristics that result in sense of commitment toward those who are in pain or distress. It is more like acting with compassion and sympathy towards underprivileged and disadvantaged. Penner, Fritzsche *et al.*, (1995) defined social responsibility “as an ethical philosophy or ideology that a person has a moral obligation to act in a certain way that benefits society as a whole”. Therefore, in general, it is kind of moral duty for every individual to perform in a way that can maintain equilibrium between the economy and environment.

In the field of social entrepreneurial research, this antecedent is not much explored and tested. Prominent researchers in the field of social entrepreneurship like Dees (2001) mentioned the self-sacrificing behaviour of social entrepreneurs. Mair and Nooba(2006) identified social entrepreneur as social change agents with strong ethical fibre. Therefore, it is advisable to measure sense of social responsibility in relation to social entrepreneurs. In her research study, Nga and Shamuganathan (2010) found out that social responsibility is the main trait that differentiates social entrepreneur with business entrepreneurs.

In the literature of social entrepreneurial intentions formation till today only Ernst (2011) tried to measure the effect of social responsibility on the intentions formation. In her research study, social responsibility showed a significant relationship with attitude toward becoming a social entrepreneur and subjective norms. But the relationship between social responsibility and perceived behavioural control were not tested in this research study. Therefore, in this research study, we are testing the effect of social responsibility on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H10.1: Social responsibility has a positive impact on attitude toward becoming a social entrepreneur.

H10.2 Social responsibility has a positive impact on subjective norms (Normative Beliefs).

H10.3. Social responsibility has a positive impact on perceived behavioural control.

3.5.3 Social Factors

As to the social dynamics of entrepreneurship, the main focus of this study is under the influence of immediate social factors that students are exposed to. As the present study has emphasized on undergraduate students from technical universities, therefore, it is very important to measure the type of environment universities provide in order to motivate their students toward social entrepreneurial activities. By immediate social factors here, we mean prior exposure to social entrepreneurial activities and entrepreneurial education as described in next sections.

(iv) Prior exposure to social entrepreneurial activities (PrExp)

A basic assumption of Shapero's model is that previous experience influences entrepreneurial intentions indirectly. Similarly, models like the theory of planned behaviour also assume that prior experience manipulates individual's intentions indirectly

(Krueger, 1993). Kolvereid (2009), stresses on the idea that prior experience affects an individual's propensity to act in a positive manner (Iakovleva and Kolvereid, 2009). It is commonly observed that a prior exposure to working for the community development or participation in any social cause is beneficial towards the creation of a social entrepreneurial. Ernst (2011) emphasised the significant contribution of past experience in social entrepreneurship. She also highlighted that an individual who took part in any kind of social activity has a higher inclination towards choosing social entrepreneurial as his career option (Ernst, 2011). According to Hockerts' (2015), previous experience is one of the most crucial variables towards predicting social entrepreneurial intentions (Hockerts', 2015). It might be the underlying reason that existing information and knowledge about the social issues and individual participation towards the development of the society exert a positive influence on the intentions formation. Therefore, in this research study, we are testing the effect of prior exposure to social activities on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H11.1: Prior exposure to social entrepreneurial activities has a positive impact on attitude toward becoming a social entrepreneur.

H11.2: Prior exposure to social entrepreneurial activities has a positive impact on subjective norms (Normative Beliefs)

H11.3: Prior exposure to social entrepreneurial activities has a positive impact on perceived behavioural control.

(v) Entrepreneurial educational background (EnBkg)

As described by Liñán, 2004, entrepreneurship education can be defined as “*the whole set of education and training activities -within the educational system or not- that try to develop in the participants the intentions to perform entrepreneurial behaviors', or some of the elements that affect that intentions, such as*

entrepreneurial knowledge, desirability of the entrepreneurial activity, or its feasibility”.

Scholars have empirically provided evidence that entrepreneurship education is an effective means of inspiring students’ intentions towards an entrepreneurial career (Fayolle and Gailly, 2004; Lee, Chang and Lim, 2005; Matlay, 2008; Izedonmi and Okafor, 2010; Ooi *et al.*, 2011). Matlay (2008) in his longitudinal study conducted over a ten-year period found that all the 64 graduates in his research sample, which had undergone entrepreneurship education, became entrepreneurs.

In entrepreneurial intentions’ studies, entrepreneurial education is categorised into two broad categories namely: entrepreneurial awareness education and education for start-up.

1. *Entrepreneurial awareness education:* Example of entrepreneurial awareness education would be elective courses offered by universities like Stanford and Harvard etc. These type of courses are specifically designed for management or engineering streams. Tutors do not really aim to convert students into entrepreneurs, but they act as an advisor to facilitate their future professional career selection.
2. *Education for start-up:* This type of education would be centred on the explicit realistic aspects related to the start-up phase: how to get financing; awareness about legal regulations; knowledge about taxation; and so on (Lorz, 2011). Although entrepreneurial educational background proved to have been an important factor in entrepreneurial intentions studies researchers failed to find any relationship between entrepreneurial educational background and subjective norms (Ernst, 2011; Liñán and Chen, 2006; Wu and Wu, 2008). In respect of this research study, we assume that entrepreneurial educational background affects attitude toward becoming a social entrepreneur.

In the field of social entrepreneurship, there are a handful of research studies that have tried to measure the effect of education on social entrepreneurial intentions. Penner (2005) in their

research study of prosocial behaviour found out that increase in education and income level of individual increases his/her social activity. Harding (2006) also point out that full-time educational course increases social entrepreneurial activities. Kirby and Ibrahim (2011) carried out a research study to find out the level of awareness about social entrepreneurial education in Egyptian universities. Findings of this research study revealed that although governments provide a lot of initiatives to promote social entrepreneurship changes had to be made in the education system to encourage students to think and behave more entrepreneurially, at the same time equipping them with the skills to start their own ventures on graduation.

In Ernst (2011) study exposure to social entrepreneurial courses showed a positive relationship with all the three antecedents of the theory of planned behaviour. In Hockerts' (2015) study students social entrepreneurial intentions motivate them to opt for courses related to social entrepreneurship. In the social entrepreneurship literature education directly or indirectly is related to the intentions formation process. Therefore, in this research study, we are testing the effect of entrepreneurial education on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H12.1: Entrepreneurial educational background has a positive impact on attitude toward becoming a social entrepreneur.

H12.2: Entrepreneurial educational background has a positive impact on subjective norms (Normative belief).

H12.3: Entrepreneurial educational background has a positive impact on perceived behavioural control.

3.5.4 Enablers

The term “enabler” was first coined by Mair and Noboa (2006). Enabler comprised of two antecedents viz. self-efficacy and perceived social support that affects perceived desirability (how feasible to carry out particular activity) to become a social entrepreneur. First, Mair and Nooba (2006) proposed that perceived feasibility is affected by the person’s self-

efficacy for setting up the social venture; and second, that it is influenced by the person's perceived social support, i.e., by the support he/she generates from the social network.

(i) Self- efficacy (Seff)

The term self-efficacy came into limelight when Bandura's (1977b) used in social learning theory. He defined self-efficacy as a person's belief regarding his/her ability to accomplish a certain task (Bandura, 1999). Self-efficacy refers to an individual's conviction in their personal capacity to complete a job or a specific set of tasks (Bandura and Bandura, 1997; Bandura, 1990). Entrepreneurial self-efficacy is described as the degree to which one believes that he or she is able to successfully start a new business venture (Sánchez, 2010). Self- efficacy is considered as one of the best predictors of career selection (Bandura, 1971). Various researchers proved that found out that self-efficacy envisages opportunity identification; therefore, it is always advisable to study it regarding entrepreneurial intentions phenomena (Krueger and Brazeal, 1994). Self-efficacy is considered one of the strongest antecedents that affect the decision process of the person. In a meta-analysis study conducted by Armitage and Conner (2001), self-efficacy emerged as one of the most influential factors in predicting entrepreneurial intentions.

The importance of self-efficacy as an affecting antecedent is also identified by researchers in the field of social entrepreneurial research. In social entrepreneurial research, Mair and Noboa (2006) suggest that "high level of self-efficacy allows a person to perceive the creation of a social venture as feasible, which positively affects the formation of the corresponding behavioural intentions" (Mair and Martí, 2006). Although in Ernst (2011) study self- efficacy does not show any significant with subjective norms but showed a positive significant relationship with both attitude toward becoming a social entrepreneur and perceived behavioural control. Smith and Woodworth (2012) found out that social entrepreneurial education should make efforts to develop social entrepreneurial self-efficacy among youth. Hockerts' (2015) also emphasised the importance of self-efficacy in

his study. Therefore, self-efficacy is not only an important element of intentions formation in the entrepreneurial intentions studies but also in social entrepreneurial intentions studies.

In conclusion, social entrepreneurship always works toward solving any social issue like education, rural areas etc. Specifically, in developing country like India social enterprises face a lot of problem due to lack of resources and limited opportunities. In such scenario is considered as an important attribute in order to motivate people toward social entrepreneurial activities. Therefore, in this research study, we are testing the effect of self-efficacy on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H13.1: Self-Efficacy has a positive impact on attitude toward becoming a social entrepreneur.

H13.2: Self-Efficacy has a positive impact on subjective norms (Normative belief).

H13.3: Self-Efficacy has a positive impact on perceived behavioural control

(ii) Perceived Social Support (PSP)

Without proper support, the entrepreneurs not succeed. Networks, efficient in contextual terms, are necessary for the success of entrepreneurs. The social endorsement required by a social entrepreneur depends on their social capital, a term commonly associated with trust, civic spirit, and solidarity. Thus, we can apprehend social support as trust and cooperation which is obtained from the social networks (Backman and Smith, 2000).

The fourth construct in Mair and Noboa's (2006) model is based on Ajzen's (2002a) suggestion that a person's perception of external control is a significant precursor of intentions. In essence, this construct refers to an individual's beliefs regarding the malleability of the context of behaviour towards his own will. According to the hypothesis by Mair and Noboa, this has to be measured by the support that an individual expects from his surroundings. To illustrate, can a social entrepreneur expect economic or related backups from his environment? The support systems and networks like Ashoka or the

Schwab Foundation can assume a significant role in this situation (Meyskens *et al.*, 2010; Ruttman, 2012).

Researchers do not recognise social support as a discriminating element among social entrepreneurs, entrepreneurs and/or managers. Yet they consider it as a crucial factor in the SE process; as an essential but not sufficient condition for the development of perceptions regarding the feasibility of carrying out a social venture. Actually, social support is a second enabling force in this process. While self-efficacy implies a self-directed enabling process, social support refers to a process influenced and directed by others. Therefore, in this research study, we are testing the effect of perceived social support on the constructs of the theory of planned behaviour which affects social entrepreneurial intentions. Following hypotheses formed on the basis of above explanation:

H14.1: Perceived social support has a positive impact on attitude toward becoming a social entrepreneur.

H14.2: Perceived social support has a positive impact on subjective norms (Normative beliefs)

H14.3: Perceived social support has a positive impact on perceived behavioural control.

3.6 Hypotheses

In this section various hypotheses developed for the purpose of this study is discussed:

Table 3.2: Hypotheses

Hypothesis No.	Hypotheses
1.1	Attitude towards becoming a social entrepreneur has a positive impact on social entrepreneurial intentions
1.2	Subjective Norms (Normative beliefs) have a positive impact on social entrepreneurial intentions
1.3	Perceived behavioural control has a positive impact on social entrepreneurial intentions
2.1	Creativity is positively has a positive impact on attitude toward becoming a social entrepreneur
2.2	Creativity has a positive impact on subjective norms (Normative beliefs)
2.3	Creativity has a positive impact on perceived behavioural control
3.1	Proactivity has a positive impact on attitude toward becoming a social entrepreneur
3.2	Proactivity has a positive impact on subjective norms (Normative belief)

Hypothesis No.	Hypotheses
3.3	Proactivity has a positive impact on perceived behavioural control
4.1	Innovativeness has a positive impact on attitude towards becoming a social entrepreneur
4.2	Innovativeness has a positive impact on subjective norms (Normative beliefs)
4.3	Innovativeness has a positive impact on perceived behavioural control
5.1	Risk-taking propensity has a positive impact on attitude toward becoming a social entrepreneur
5.2	Risk-taking propensity has a positive impact on subjective norms (Normative belief)
5.3	Risk-taking propensity has a positive impact on perceived behavioural control
6.1	Emotional Intelligence has a positive impact on attitude towards becoming a social entrepreneur
6.2	Emotional Intelligence has a positive impact on subjective norms (Normative belief)
6.3	Emotional Intelligence has a positive impact on perceived behavioural control
7.1	Internal Locus of Control has a positive impact on attitude towards becoming a social entrepreneur
7.2	Internal Locus of Control is positively associated with subjective norms(Normative belief)
7.3	Internal Locus of has a positive impact on perceived behavioural control
8.1	Empathy has a positive impact on attitude toward becoming a social entrepreneur
8.2	Empathy has a positive impact on subjective norms (Normative Beliefs)
8.3	Empathy has a positive impact on perceived behavioural control
9.1	Moral obligation has a positive impact on to attitude towards becoming a social entrepreneur
9.2	Moral obligation has a positive impact on subjective norms (Normative beliefs)
9.3	Moral obligation has a positive impact on perceived behavioural control
10.1	Social responsibility has a positive impact on attitude towards becoming a social entrepreneur
10.2	Social responsibility has a positive impact on subjective norms (Normative Beliefs)
10.3	Social responsibility has a positive impact on perceived behavioural control
11.1	Prior exposure to social entrepreneurial activities has a positive impact on attitude toward becoming a social entrepreneur
11.2	Prior exposure to social entrepreneurial activities has a positive impact on subjective norms (Normative beliefs)
11.3	Prior exposure to social entrepreneurial activities has a positive impact on perceived behavioural control
12.1	Entrepreneurial educational background has a positive impact on attitude toward becoming a social entrepreneur
12.2	Entrepreneurial educational background has a positive impact on subjective norms (Normative beliefs)
12.3	Entrepreneurial educational background has a positive impact on perceived behavioural control
13.1	Self-Efficacy has a positive impact on attitude towards becoming a social entrepreneur
13.2	Self-Efficacy has a positive impact on is positively associated with subjective norms (Normative beliefs).
13.3	Self-Efficacy has a positive impact on perceived behavioural control
14.1	Perceived social support has a positive impact on attitude towards becoming a social entrepreneur
14.2	Perceived social support has a positive impact on with subjective norms (Normative Beliefs)
14.2	Perceived social support has a positive impact on perceived behavioural control

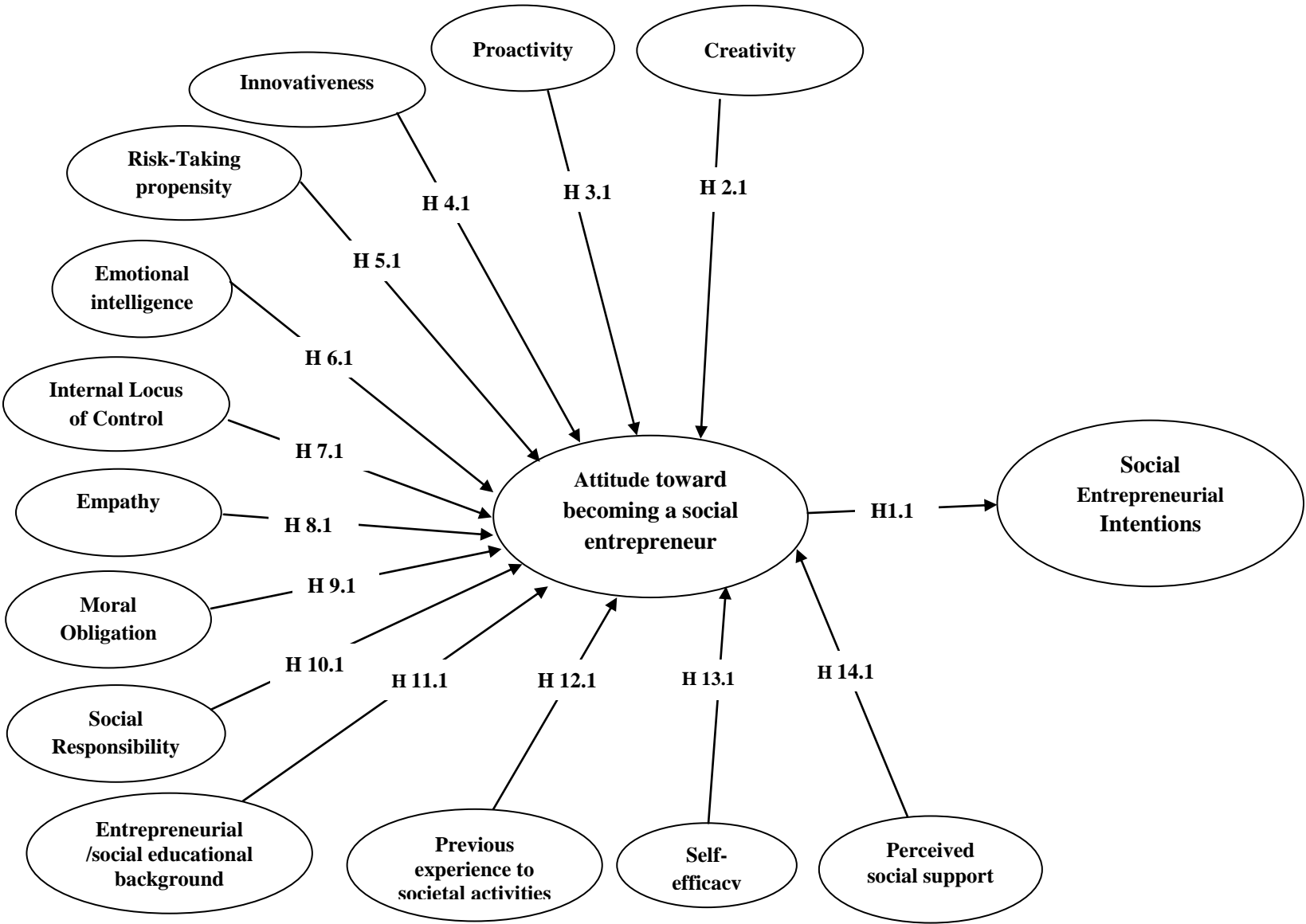


Figure 3.4: Hypothesised Model for Effect of antecedents on attitude toward becoming a social entrepreneur

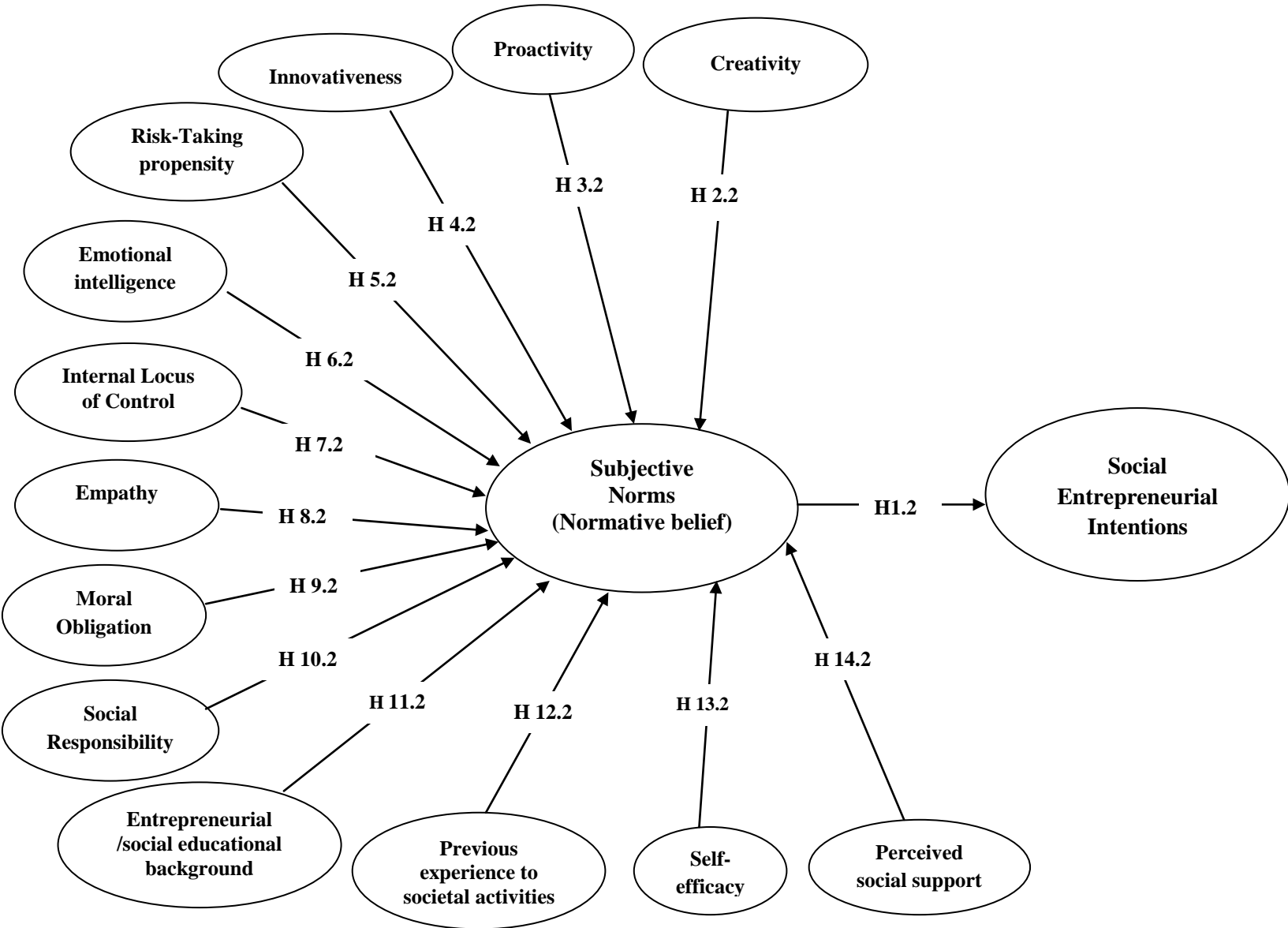


Figure 3.5: Hypothesised Model for Effect of antecedents on subjective norms (Normative beliefs)

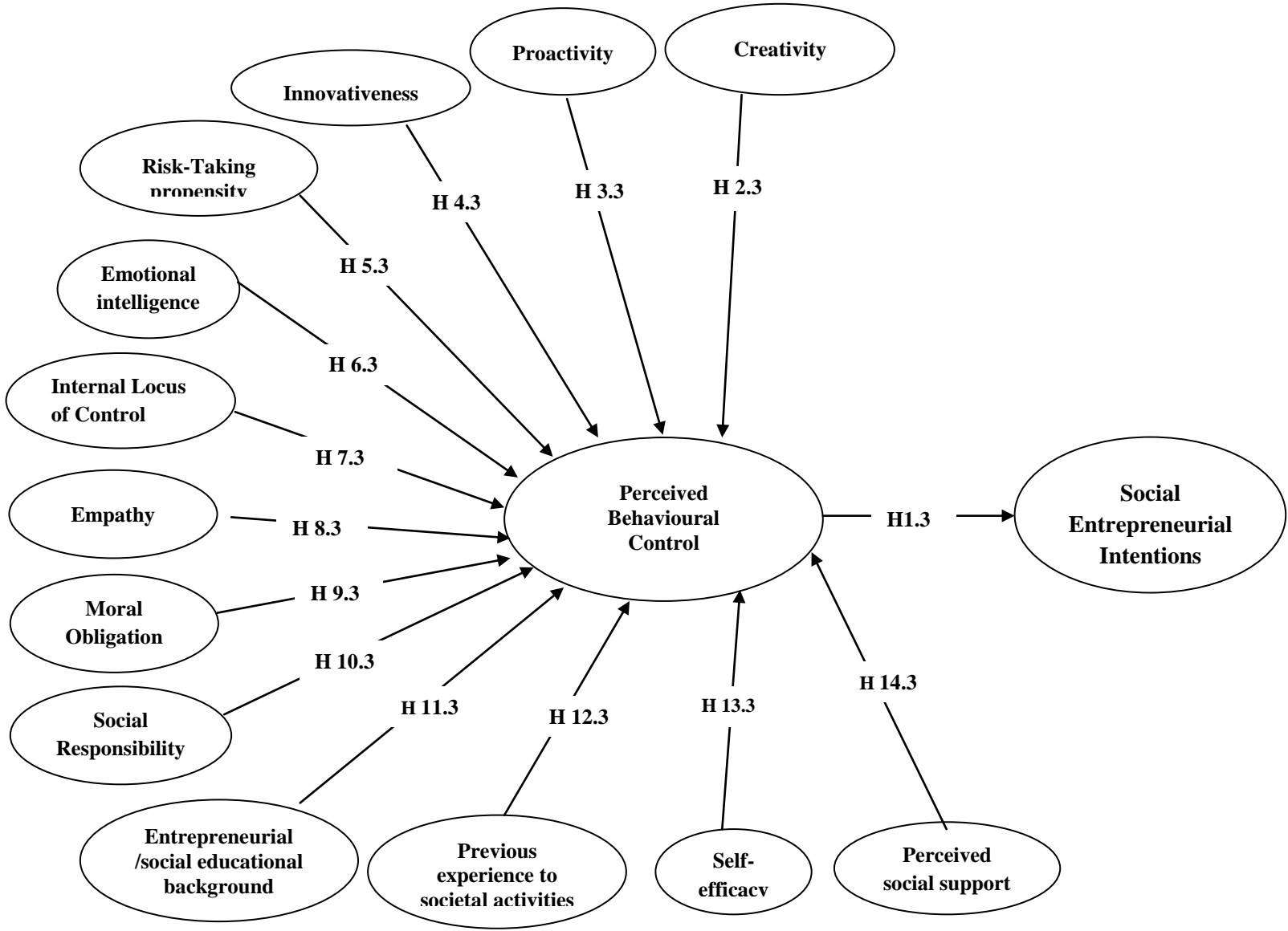


Figure 3.6: Hypothesised Model for Effect of antecedents on perceived behavioural control

3.7 Concluding Remarks

In this chapter, we discussed various antecedents identified and the development of the hypotheses. Next Chapter 4 discusses research design and research methodology and statistical tools that will be used for testing the above hypotheses.

Chapter 4

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

In this chapter, the research design and the research methodology used to collect data as well as statistical methods that are used for data analysis are presented. In the previous chapter, proposed research model was explained and the hypotheses developed were stated.

4.2 Overview of Research Process

To test the proposed model of social entrepreneurship intentions the survey method has been used. The research process followed for this study is presented in Figure 4.1. A questionnaire is developed to collect responses regarding social entrepreneurship intentions and the identified critical antecedents. For data analysis, both exploratory factor analysis and confirmatory factor analysis was used. Exploratory factor analysis was also used to investigate the underlying dimensionality of the items and for dimension reduction.

Churchill (1979) suggested that in order to measure the identified critical antecedents, the questionnaire should be developed based on the extensive literature review. Apart from an extensive literature review in the field of TPB, research studies from social entrepreneurship, entrepreneurship and social psychological research are considered for the development of the questionnaire. Pretests are suggested when testing new scales (Churchill, 1979). Pretests also offer the option to test various types of scales and develop the final measurement scale.

A sample of 55 undergraduate students from a premier technical university and a sample of 15 entrepreneurs were used for pretesting of items taken in the questionnaire.

The questionnaire was personally administered by the researcher. The students were called to provide direct feedback on the utility, time required to fill the questionnaire and whether questions were understandable or not. On the basis of results of the pretest, the questionnaire was refined. The research process followed in this study is shown in

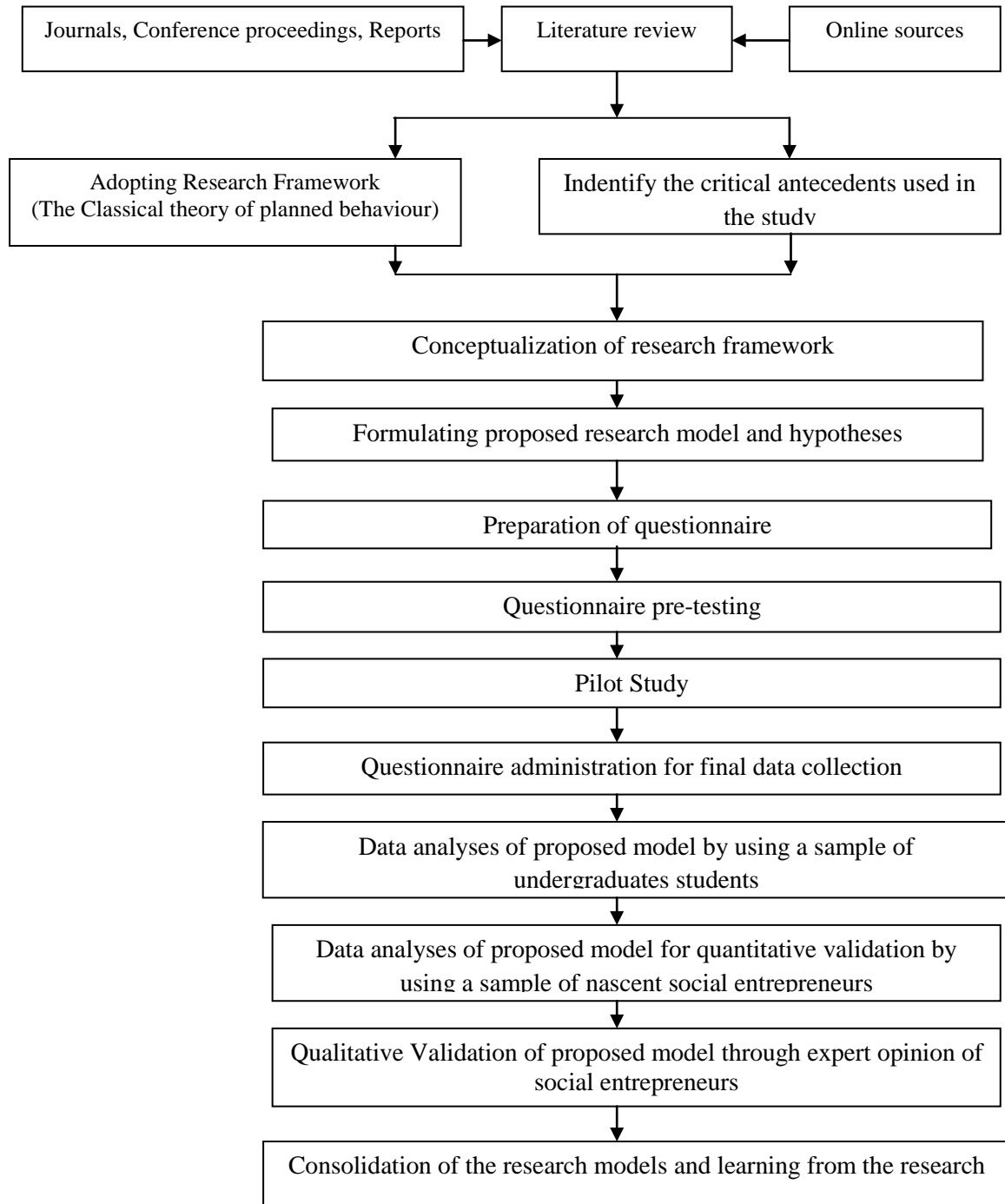


Figure 4.1: Research Process Followed

In the final questionnaire, an explanation was explicitly given regarding privacy of their responses and meaning of social entrepreneurship. Beside these explanations, the researcher has explained the meaning of terms like social enterprise, social entrepreneurship and social entrepreneurial intentions to the participants.

4.3 Research Instrument Development

As mentioned previously, measures were developed based on extensive literature review and run through a pretest before being included in the final questionnaire. On the one hand, based on the density of the model, it was evident that the questionnaire would be lengthy. On the other hand, participant's attention and the quality of answers diminish if questionnaires are too long.

Therefore, each scale was kept as short as possible – without compromising the validity or reliability of the constructs. Specifically, the following criteria were assessed: a scale as short as possible, ideally maintaining Cronbach's alpha over $\alpha = .70$ (Churchill, 1979), retaining the relevant content. Previously tested scales were adapted from existing studies. If several scales existed, the scale was chosen which fitted best concerning content and had good results in previous studies. If no scales existed, they were developed, based on the steps suggested by Churchill (1979). This study adapted all constructs to social entrepreneurship, both independent and dependent, and chose those items best suited for the measurement of each construct. All scales were 7-point Likert scales.

Previously existing scales were used and modified on the basis of the nature of the research study. If multiple scales existed, the scale was used which suited best regarding content and showed good empirical results in the previously used studies. This research study used all antecedents in relationship to social entrepreneurship.

Master questionnaire developed on the basis of various research studies is shown in

Table 4.1

Table 4.1: Existing scales referred to the development of the Questionnaire

S.No.	Antecedents	Items adapted from the scales given by Author(s) & Year	Number of items
1	Social entrepreneurial intention	Krueger, Reilly, and Carsrud (2000)	5
2	Attitude towards becoming a social entrepreneur	Linan and Chen, 2009	6
3	Subjective norms (Normative belief)	Liñán and Chen, 2007; Liñán and Chen, 2009	3
4	Perceived behavioural control	Liñán and Chen, (2009) and Ernst (2011)	5
5	Creativity	Zhou and George (2001)	8
6	Proactivity	Bateman and Crant's (1993)	6
7	Innovativeness	Bönte and Jarosch, 2010) and Zampetakis <i>et al.</i> , (2011)	4
8	Risk taking propensity	Rohrmann (1997)	5
9	Internal locus of control	Hodgkinson (1992)	3
10	Emotional intelligence	Zampetakis, 2011; Zampetakis <i>et al.</i> , 2009	10
11	Empathy	Ernst (2011)	6
12	Moral obligation	Ernst, 2011; Forster & Grichnik, 2013; Hemingway, 2005; Nga and Shamuganathan, 2010, Hockert's (2015)	3
13	Social responsibility	Bierhoff and Schülken (1999) and Ernst (2011)	3
14	Entrepreneurial/social education background	Kirby and Ibrahim, (2011)	6
15	Self-efficacy	(Hockerts, 2014)	5
16	Perceived social support	(Hockerts, 2015a)	4

The explanation of the scale development for each variable taken in the study is explained in subsequent sections.

(i) Social Entrepreneurial Intentions (SEI)

In the literature of entrepreneurial intentions, there are various scales that measured intentions. For this study 9 items scale was used, adapted from Krueger, *et.al*, (2000) study. The items were measured on a 7-point Likert scale from 1 = strongly disagree and 7 = strongly agree. When all 9-items were used scale showed a Cronbach's α of 0.61 and also some items showed cross-loadings, therefore, three items were excluded from the scale and final 5-items scale was used to measure social entrepreneurial intentions. Higher scores reflect stronger social entrepreneurial intentions. The final items taken in the questionnaire for social entrepreneurial intentions are given in Table 4.4.

(ii) Measurement of attitude towards becoming a social entrepreneur (ATB)

Attitudes towards becoming a social entrepreneurship were measured with two sets of six items that evaluate estimated results of a social entrepreneurial as a career based on Entrepreneurial intention questionnaire (Linan and Chen, 2009). After exploratory factor analysis of the items reduced and final scale comprised of 5-items. The final items taken in the questionnaire for measuring attitude towards social entrepreneur are given in Table 4.4.

(iii) Subjective Norms (SN) (Normative belief)

To measure subjective norms authors used EIQ (Liñán and Chen, 2007; Liñán and Chen, 2009). EIQ consists of two sets of three items that measured the normative belief. (Rueda *et al.*, 2015). The final items taken in the questionnaire for subjective norms (normative belief) are given in Table 4.4.

(iv) Perceived behavioural Control (PBC)

To measure PBC researchers used five items scaled developed by Liñán and Chen, (2009) and modified by Ernst (2011). The items were measured on a 7-point Likert scale from 1= strongly disagree and 7= strongly agree. The final items taken in the questionnaire for perceived behavioural control are given in Table 4.4.

(v) Creativity (Cr)

To measure creativity we used Zhou and George (2001) 12-item scale. Seven points Likert scale was used to measure the items. When we used all 12-items some items showed cross-loadings, therefore, we removed 4-items with factor loading less than 0.5. Final questionnaire comprised of eight items. Four items showed the development of the creative ideas and remaining four items showed production of constructive ideas. The final items taken in the questionnaire for creativity are given in Table 4.4.

(vi) Proactivity (Pro)

In order to measure the proactivity, Bateman and Crant's (1993) 6-item scale was used. Based on the exploratory factor analysis proper reliability and validity of the scale have been established. The final items taken in the questionnaire for proactivity are given in Table 4.4.

(vii) Innovativeness (Inno)

As mentioned by Schumpeter (1934) social entrepreneurs should be imbuing with the zeal to "reform or revolutionise". Innovation is the core of entrepreneurship. 4-item scale based on the research studies of (Bönte and Jarosch, 2010) and (Zampetakis *et al.*, 2011) used to measure creativity. The final items taken in the questionnaire for innovativeness are given in Table 4.4.

(viii) Risk Taking Propensity (RTP)

A 5-item modified version of the Risk Orientation Questionnaire (ROQ) developed by Rohrmann (1997) is used to measure risk-taking propensity. The final items taken in the questionnaire for risk-taking propensity are given in Table 4.4.

(ix) Internal Locus of Control (ILOC)

Bird(1988) highlighted that entrepreneurial intention is projected toward either developing a new entity or generating new values to the already existing ventures. A 3-item scale developed by Hodgkinson (1992) used to measure the locus of control at the personal level. The final items taken in the questionnaire for internal locus of control are given in Table 4.4.

(x) Emotional Intelligence (EmIn)

To measure emotional intelligence authors used 10 items scale adopted from Zampetakis & Moustakis, 2006; Zampetakis, *et al.*, 2009; Zampetakis, 2011). The final items taken in the questionnaire for emotional intelligence are given in Table 4.4.

(xi) Empathy (Emp)

In order to measure empathy 6-item scale developed by Ernst (2011) was used. It is newly developed scale in the field of social entrepreneurial research. Various social intention studies(Ernst 2011; Nga & Shamuganathan 2010; Hemingway 2005) were considered while forming this scale. The final items taken in the questionnaire for empathy are given in Table 4.4.

(xii) Moral Obligation (MO)

The moral obligation was measured using SEAS scale (social entrepreneurial antecedent scale) developed by Hockert's (2015). It is newly developed scale in the field of social entrepreneurial research. Various social intention studies (Ernst, 2011; Forster and Grichnik, 2013; Hemingway, 2005; Nga and Shamuganathan, 2010) were considered while forming this scale. SEAS scale was validated on three different sample (Hockerts, 2015b). Therefore, to measure moral obligation a four items questionnaire was used. Seven points Likert scale was used to measure the items. The final items taken in the questionnaire for moral obligation are given in Table 4.4.

(xiii) Social responsibility (SR)

To measure social responsibility we followed standard questionnaire of Bierhoff and Schülken (1999) and Ernst (2011). The final three items were chosen based on the relevance of their content and high factor loading. The final items taken in the questionnaire for social responsibility are given in Table 4.4.

(xiv) Entrepreneurial/Social Education Background

In order to measure social entrepreneurial educational, we divided it into three sub-categories. First, three questions related to whether the sampling element had taken courses related to social entrepreneurship and next three questions comprised of social entrepreneurship awareness following the recommendation of Kirby and Ibrahim, (2011). And in the last subcategory, students were asked whether they were involved in courses related to entrepreneurship and business ethics. The responses were measured in "yes" or "No" where "yes" coded as 1 and "No" coded as 2. The final items taken in the questionnaire for entrepreneurial/social education background are given in Table 4.4.

(xv) Self-efficacy (SeEff)

In order to measure social entrepreneurial self-efficacy considering the recommendation is given by (Hockerts, 2014), we develop a 3-item scale. The final items taken in the questionnaire for efficacy are given in Table 4.4.

(xvi) Perceived Social Support (PSP)

To measure perceived social support 4-item scale of was adopted from (Hockerts, 2014a). The final items taken in the questionnaire for perceived social support are given in Table 4.4.

In the present model, social entrepreneurial intentions are taken as the dependent variable for attitude, subjective norms (normative belief) and perceived behavioural control towards becoming a social entrepreneur. At next level of analysis in the hypothesised (proposed) model attitude toward becoming a social entrepreneur, subjective norms (normative belief) and perceived behavioural control are taken as dependent variable for all the identified antecedents (creativity, proactivity, innovativeness, risk taking propensity, internal locus of control, emotional intelligence, empathy, moral obligation, social responsibility, entrepreneurial education background and previous exposure to social entrepreneurial activities, self-efficacy and perceived social support).

4.4 Pilot Study

In the pilot study data was collected from a premier technical university. The method of sampling used was quota sampling. Responses were collected from final year students of engineering as they are more clear about their professional choices. Eight hundred questionnaire were distributed to the students out of which we received five hundred fifty-five completed questionnaire corresponding to a 68.75% response rate. 58%

(N=319) of the respondents were male and 31% (N=171) were female and the average age of the respondents was approximately 20 years.

Respondents were also invited to endow with qualitative comments on whether they felt that the questions were clearly stated and easily understood. Measure cleansing and modification of questionnaire was done on the basis of exploratory factor analysis as well as on the qualitative feedback from respondents. Seven points Likert's scale used on the basis of psychometric literature suggests that having more scale points is better but there is a diminishing return after 11 points (Nunnally, 1978). Having seven points tends to be a good balance between enough points for providing more options without having to maintain too many response options. Therefore, a seven-point Likert scale was used to measure the construct. The survey questionnaire was presented to the pilot took around 30-40 minutes to complete the questionnaire. As a result, the pilot scale is significantly different from the final scale.

4.4.1 Exploratory Factor Analysis

Exploratory factor analysis was used to discover the essential dimensionality of the items. Prior to factor analysis, the factorability of the data was assessed by applying Bartlett's test of sphericity and the Kaiser-Meyer-Olin's (KMO) measure of sampling adequacy. The analysis found a KMO value of .866 and a significant Bartlett's test (χ^2 1765, 40, $p < 0.000$) indicating that factor analysis is appropriate (Hair, *et.al.*, 2010). A review of the scree plot of eigenvalues (Cattell, 1966) suggests a sixteen-factor solution. Cronbach's alpha for factor 1 (attitude toward becoming a social entrepreneur) 0.884, factor 2 (subjective norms) 0.662, factor 3 (perceived behavioural control) 0.849, factor 4 (innovativeness) was 0.865, for factor 5 (creativity) 0.828, for factor 6 (proactivity) 0.821, factor 7 (locus of control) 0.797, factor 8 (risk-taking propensity) 0.773, factor 9 (emotional

intelligence)0.818, factor 10 (empathy) 0 .848, factor 11 (moral obligation). 795, factor 12 (social responsibility) 0.792, factor 13 (educational background) 0.851, factor 14 (previous experience) 0.742, factor 15(self-efficacy) 0.889 and factor 16 (perceived social support) 0 .789 suggesting that the sixteen scales are internally consistent (Hair et al., 2010) and thus establishing convergent validity. Table 4.4 provides an overview of the items and their loadings on the thirteen factors. Analysis of variable takes place as given below

KMO and Bartlett’s test is performed, and the result of the test is shown in Table 4.2. From the Table 4.2, it is evident that the KMO value is 0.947, and the significance value is 0.000. Therefore, the data are appropriate to proceed with factor analysis

Table 4.2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.947
Bartlett's Test of Sphericity	Approx. Chi-Square	8357.372
	Df	595
	Sig.	.000

Table 4.3 shows the result of communalities.

Table 4.3: Communalities

Constructs	Initial	Extraction
Attitude towards becoming a social entrepreneur	1.000	0.774
Subjective Norms (Normative belief)	1.000	0.796
Perceivedbehavioural Control	1.000	0.812
Social Entrepreneurial Intentions	1.000	0.788
Creativity	1.000	0.880
Proactivity	1.000	0.793
Innovativeness	1.000	0.809
Risk –taking propensity	1.000	0.811

Internal Locus of Control	1.000	0.735
Emotional Intelligence	1.000	0.782
Empathy	1.000	0.709
Moral Obligation	1.000	0.699
Social Responsibility	1.000	0.910
Prior exposure to entrepreneurial activities	1.000	0.952
Entrepreneurial/Social Entrepreneurial Educational Background	1.000	0.926

Table 4.4: Items used in the Questionnaire

Construct	Items label	Item
Attitude toward becoming a social entrepreneur (ATB)	ATB1	Becoming a social entrepreneur implies more advantages than disadvantages to me
	ATB2	Among various options, I'd rather be a social entrepreneur
	ATB3	A career as a social entrepreneur is attractive for me
	ATB4	If I had the opportunity and resources, I'd like to start a social enterprise
	ATB5	I believe that if I will start my social firm, I will certainly succeed
Subjective norms (Normative Belief) (SN)	SN1	My close family will approve my decision to start a social venture
	SN2	My friends will approve my decision to start a social venture
	SN3	My colleagues will approve my decision to start a social venture
Perceived behavioural control (PBC)	PBC1	Start a social firm and keep it working would be easy for me
	PBC2	I'm prepared to start a viable social firm
	PBC3	I can control the creation process of a new social firm
	PBC4	I know the necessary practical details to start a firm
	PBC5	If I tried to start a firm, I would have a high probability of succeeding
Social Entrepreneurial	SEI1	I have a preliminary idea for a social enterprise on which I plan to act in the future

Construct	Items label	Item
Intentions (SEI)	SEI2	I do not plan to start a social enterprise.
	SEI3	I'm ready to make anything to be a social entrepreneur
	SEI4	My professional goal is becoming a social entrepreneur
	SEI5	I have very seriously thought about starting a social firm
Innovativeness (Inno)	Inno1	I am an inventive person who has ideas
	Inno2	I get excited by creating my own work opportunities
	Inno3	I am able to create better social value compared to normal entrepreneur
	Inno4	I am able to deliver sustainable advantage through innovative goods and services.
Creativity (Cr)	Cre1	I exhibit creativity on my assignments when given the opportunity to
	Cre2	I develop adequate plans and schedules for the implementation of new ideas
	Cre3	I come up with creative solutions to problems
	Cre4	I am a good source of creative ideas
	Cre5	I suggest new ways achieve goals or objectives
	Cre6	I came up with new and practical ideas to improve performance
	Cre7	I suggest new ways increase the quality of project assignments
	Cre8	I suggest new ways of performing assignment tasks
Proactivity (Pro)	Pro1	If I see something I don't like, I fix it
	Pro2	If I believe in an idea, no obstacle will prevent me from making it happen
	Pro3	I love being a champion for my ideas, even against others' opposition
	Pro4	No matter what the odds, if I believe in something I will make it happen
	Pro5	I am always looking for better ways to do things
	Pro6	I excel at identifying opportunities
Internal Locus of Control (ILOC)	Loc1	The earnings I make are the result of my own efforts
	Loc2	Luck has little or nothing to do with it
	Loc3	A great deal that happens to me is probably a matter

Construct	Items label	Item
		of chance' (reverse coded).
Risk taking propensity (RTP)	RTP1	I don't like to put something at risk, I would rather be on the safe side
	RTP2	Even when I know that my chances are limited I try my luck
	RTP3	I am quite cautious when I make plans and when I act on them
	RTP4	If a task seems interesting I'll choose to do it even if I'm not sure whether I'll manage it
	RTP5	I follow the motto, 'nothing ventured, nothing gained
Emotional Intelligence (EmIn)	EI1	I'm usually able to influence the way other people feel
	EI2	I usually find it difficult to regulate my emotions
	EI3	I always set goals for myself and then try my best to achieve them
	EI4	I always tell myself I am a competent person
	EI5	I am a self-motivated person.
	EI6	I would always encourage myself to try my best
	EI7	Regulation of emotion I am able to control my temper and handle difficulties rationally
	EI8	I am quite capable of controlling my own emotions
	EI9	I can always calm down quickly when I am very angry
	EI10	I have good control of my own emotions
Empathy (Emp)	Emp1	I am good at predicting how someone will feel
	Emp2	I can often understand how people are feeling even before they tell me
	Emp3	When thinking about socially disadvantaged people, I try to put myself in their shoes
	Emp4	I can tell if someone is masking their true emotion
	Emp5	Seeing socially disadvantaged people triggers an emotional response in me
	Emp6	Other people tell me I am good at understanding how they are feeling and what they are thinking
Moral Obligation (MO)	MO1	We should morally compel to act in order to solve societal problems
	MO2	Are we morally obliged to help socially

Construct	Items label	Item
		disadvantaged people?
	MO3	I feel absolute moral obligation to help weaker section of the society
	MO4	It is morally responsible to help less fortunate people.
Social Responsibility (SR)	SR1	I want to support people who have no lobby or social support
	SR2	I would like to show solidarity with groups in need
	SR3	I want to create social change
Previous experience (PrExp)	PrExp1	I have some experience working with social problems
	PrExp2	I have volunteered or otherwise worked with social organisations.
	PrExp3	I know a lot of social organisations
Self-efficacy (SeEff)	SeEff1	I am convinced that I personally can make a contribution to addressing societal challenges if I put my mind to it
	SeEff2	I could figure out a way to help solve the problems that society faces
	SeEff3	Solving societal problems is something each of us can contribute to
Perceived Social Support (PSP)	PSP1	It is possible to attract investors to an organisation that wants to solve social problems. ?
	PSP2	People would support me if I wanted to start an organisation to help socially marginalised people
	PSP3	If I planned to address a significant societal problem people would back me up
	PSP4	I do not expect that I would receive much support if I were to start a social enterprise. (reverse).

Table 4.5: Exploratory Factor Analysis Results

Construct	Items	Cronbach's Alpha	Factor Loadings
Attitude toward becoming a social entrepreneur	ATB1	.884	.731
	ATB2		.619
	ATB3		.662
	ATB4		.834
	ATB5		.799
Subjective norms	SN1	.662	.666

Construct	Items	Cronbach's Alpha	Factor Loadings
	SN2		.578
	SN3		.717
Perceived behavioural control	PBC1	.849	.733
	PBC2		.778
	PBC3		.701
	PBC4		.849
	PBC5		.886
Social Entrepreneurial Intentions	SEI1	.830	.772
	SEI2		.834
	SEI3		.668
	SEI4		.889
	SEI5		.785
Innovativeness	Inno1	.865	.824
	Inno2		.881
	Inno3		.793
	Inno4		.765
Creativity	Cre1	.728	.835
	Cre2		.808
	Cre3		.769
	Cre4		.748
	Cre5		.721
	Cre6		.737
	Cre7		.779
	Cre8		.849
Proactivity	Pro1	.821	.638
	Pro2		.711
	Pro3		.770
	Pro4		.838
	Pro5		.709
	Pro6		.777
Locus of Control	Loc1	.697	.663
	Loc2		.799
	Loc3		.784
Risk taking propensity	RTP1	.773	.585

Construct	Items	Cronbach's Alpha	Factor Loadings
	RTP2		.677
	RTP3		.719
	RTP4		.778
	RTP5		.801
Emotional Intelligence	EI1	.818	.646
	EI2		.595
	EI3		.781
	EI4		.840
	EI5		.699
	EI6		.792
	EI7		.701
	EI8		.726
	EI9		.633
	EI10		.700
Empathy	Emp1	.848	.880
	Emp2		.815
	Emp3		.722
	Emp4		.796
	Emp5		.831
	Emp6		.847
Moral Obligation	MO1	.795	.692
	MO2		.684
	MO3		.749
	MO4		.815
Social Responsibility	SR1	.792	.675
	SR2		
	SR3		
Previous experience	PrExp1	.742	.853
	PrExp2		.594
	PrExp3		.886
Self-efficacy	SeEff1	.889	.863
	SeEff2		.819
	SeEff3		.746
Perceived Social Support	PSP1	.742	.618

Construct	Items	Cronbach's Alpha	Factor Loadings
	PSP2		.647
	PSP3		.797
	PSP4		.898

KMO value = 0.883; Sig. level = 0.000; Variance explained = 79.651%

Cronbach's alpha for all the antecedents driver constructs lies in the range of 0.578 to 0.898. As a rule of thumb, an alpha coefficient of above 0.6 is acceptable, and in particular for new scales. All the items meet the standards of convergent validity. All items load on unique components with factor loadings greater than 0.5. Therefore, on the basis of exploratory factor analysis, we developed final questionnaire before final data collection process.

4.5 Refinement of Research Instrument

As mentioned previously, measures were developed based on extensive literature review and run through a pretest before being included in the final questionnaire. On the one hand, based on the density of the model, it was evident that the questionnaire would be lengthy. On the other hand, participant's attention and the quality of answers diminish if questionnaires are too long. Therefore, each scale was kept as short as possible – without compromising the validity or reliability of the constructs. Specifically, the following criteria were assessed: a scale as short as possible, ideally maintaining Cronbach's alpha over $\alpha = .70$ (Churchill, 1979), retaining the relevant content. Previously tested scales were adapted from existing studies. If several scales existed, the scale was chosen which fitted best-concerning content and had good results in previous studies. If no scales existed, they were developed, based on the steps suggested by Churchill (1979). This study adapted all constructs to social entrepreneurship, both independent and dependent,

and chose those items best suited for the measurement of each construct. All scales were 7-point Likert scales.

Previously existing scales were used and modified on the basis of the nature of the research study. If multiple scales existed, the scale was used which suited best regarding content and showed good empirical results in the previously used studies. This research study used all antecedents in relationship to social entrepreneurship.

4.6 Sample Selection and Data Collection Procedure

A sample is a subset of people or events from the overall population that is used to analyse and should represent the qualities of the overall population (Mundry, 1999). Undergraduate (Bachelor of Engineering) students from top technical universities in India are selected as a sample population for analysing the model of social entrepreneurial intentions. In order to select the sample for the research study, we followed three main recommendations.

1. First, there is a stream of researchers in the field of entrepreneurship that motivates researchers to use a sample of students to measure entrepreneurial intentions (Kolvereid, 1996; Boyd, and Vozikis, 1994; Krueger *et al.*, 2000). Krueger's (1993) suggest that accurately measure the entrepreneurial intentions, the sample should be selected from the population of those who are currently facing major career decisions (Krueger, 1993). Krueger *et al.*, (2000) also emphasised the fact that, students on the edge of completing their studies (similar is the case of Bachelor of Engineering students in their third year of the fourth year of study) faces career decisions, have a wide array of ideas and attitudes, and although they may not have explicit business ideas, most have global attitudes regarding their future profession. Furthermore, entrepreneurship mostly takes

place when life changes happen (Shapiro and Sokol, 1982). Diana Wells (President of Ashoka Foundation) is also identified the importance of young generation in the development of social entrepreneurship and mentioned that “students who become social entrepreneurs begin in their teens. When young people are in charge more changes happen.” Due to these characteristics, various researchers in the field of entrepreneurship used student samples when studying entrepreneurial intentions (Ferri and Urbano, 2011; Kolvereid and Isaksen, 2006; Krueger, 1993; Liñán and Chen, 2009; Rueda *et al.*, 2015; Van *et al.*, 2006). Following the trend of entrepreneurship researchers in the field of social entrepreneurship emphasised regarding the importance of using student sample in order to test social entrepreneurship intentions (Ernst, 2011; Hockerts, 2015a).

2. Second recommendation to use students from top technical universities in India according to Entrepreneur India (2015) report approximately 200 IIM graduates go for entrepreneurship, whereas around 1,600 IIT students per annum choose entrepreneurship as a career option. Statistically speaking, this is one of the prominent reasons why India produces more entrepreneurs with an IIT background than an IIM one. According to a research study by PitchBook (2013) IITs ranked among top 10 non-US colleges that have produced successful founders of American ventures that raised venture capital funding between 2010 and 2013. Beside this Times Higher Education World University Rankings 2013-2014 also ranked IITs at fourth place in order to promote entrepreneurship. Before the pilot study, we did a survey in local private college. Students in that college fail to understand the basic concept related to social entrepreneurship. Hence it is very difficult to get a proper response from those students from these colleges as they are still struggling to provide proper eco-system for the

development of the entrepreneurial environment. Whereas, IITs and BITS, Pilani provide an infrastructure and facilities (differ placement, courses related to entrepreneurship/social entrepreneurship) to promote the entrepreneurial environment.

3. The present study has not confined to the sample of students from top technical institutes but also used a sample of nascent social entrepreneurs (who are already start one of the many phases of starting a social venture) for the modification of the derived model. Further qualitative validation of the model was done on the sample of social entrepreneurs.

In the questionnaire, an additional text was added that explained the meaning of terms like social enterprise, social entrepreneurship and social entrepreneurial intentions to the participants. The data was collected from January 2015 to February 2016, by personally administering the questionnaire to the undergraduate students. Total 1432 completed questionnaire were collected out of 2000 distributed questionnaires. Quota sampling was used to collect data. In order to gather representative data from a group, 200 questionnaires were collected from each college. The sample of undergraduate students aged between 17-21 years. Out of total 1432, sample 88% (1260) were male and 12% (172) were female.

For the second objective of the present study, the set of sample has been collected from nascent social entrepreneurs. A total 345 responses were collected and snowball sampling has been used. The respondents aged between 20-40 years. The rationale of the second sample is that in entrepreneurial intentions study intentions were used as a dependent variable which involves the possibility of not differentiating among ‘dreamers’ and ‘doers’. Therefore, validating the results on a sample of nascent social

entrepreneurs who have taken the actual behavioural step is always considered as an appropriate method.

Although various entrepreneurial intention studies used a sample of undergraduate students but no prior Indian study used undergraduate students in order to measure social entrepreneurial intention.

4.6.1 Structural Equation Modelling

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. The objective of this study was to assess the effect of identified critical antecedents on social entrepreneurial intentions. In order to accomplish this research objective structural equation modelling (SEM) was applied. Many research studies (Hockerts, 2015b; Rueda *et al.*, 2015; Zampetakis *et al.*, 2009) used SEM for generating an intention based model. This methodology was used to increase the credibility and reliability of the results and also allow for better comparisons.

Structural Equation modelling is a second generation multivariate statistical analysis technique mostly used to investigate structural relationships. SEM is the combination of factor analysis and multiple regression equation analysis and helpful in investigating the relationship between variables and latent constructs (Markus, 2012).

Multiple regressions, ANOVA and MANOVA etc are known as first generation multivariate analysis used for analysing constructs and relationship between constructs. One of the limitations of these first generation techniques is that they can only analyse one layer of a relationship between independent and dependent variable (Tabachnick and Fidell, 2001). In this research study, we did not use multiple regression analysis (MRA) because in MRA simultaneous investigation of model construct relationship is not

possible; analysis has to be carried out in chronological order. Therefore, we used SEM which allows simultaneous analysis for all antecedents used in the hypothesised model instead of doing them separately. Another modern technique that is used by the researchers is Path Analysis. Path analysis is considered as an extension of multiple regression analysis and a special case of structural equation modelling (Chin, 1998). The major disadvantage of path analysis is that it contains only observed variables and has a more restraining set of assumptions than structural equation modelling (for example in path analysis there is no correlation between the error terms). Most of the research studies in the field of entrepreneurship used SEM to develop model because of the fact that path analysis considers that all variables are measured without error. Whereas SEM uses a latent variable to account for the measurement (Henseler and Sinkovics, 2009).

Structural equation modelling is the two-step process: measurement model and structural model. The measurement model used to identify the relationship between measured variables and latent variables (Hulland, 1999). The structural model used to identify the relationship only between latent variables. The major advantage of SEM in relation to other statistical techniques is that latent variables are free of random error. The reason for this is that error has been estimated and removed leaving only a common variance (Fornell and Bookstein, 1982).

Software like LISREL, AMOS, DEPATH, EQS and RAMONA are most popularly used for SEM. In this research statistical software package, SPSS version 20 and AMOS was utilised to carry out the calculations.

4.7 Concluding remarks

On the basis of above explanation SEM data analysis was done which is explained in details in the next chapter. Data analysis and testing of the proposed model and the hypotheses are presented in next Chapter 5.

Chapter 5

DATA ANALYSIS AND DISCUSSION

5.1 Introduction

This chapter exhibits the results of statistical analyses performed on data collected for this research study. The data collection methodology was presented in chapter 4. Data analysis is considered as the function of interpretation to understand, clear and infers the data or information that has been collected through the questionnaires. Descriptive analysis refers to the transmission of raw data or information into a form that makes them easy to understand and interpret (Miles *et al.*, 1994). It is utilised to estimate average, frequency distribution and percentage distribution of the demographic information provided by respondent population.

Critical antecedents of social entrepreneurial intentions have been highlighted in the literature review chapter. According to the recommendation given by Anderson and Gerbing (1988), we followed two-stage analytical method to test the model. In the first stage, we fitted measurement model to the data set collected and at the second stage structural equation modelling was used. Structural equation modelling (SEM) was also used to examine the validity and reliability of each scale used in the study. Moreover, SEM is also suitable to find out the interrelationship in a proposed model (Hair, 2009). Maximum likelihood procedure was used to analyse the data.

5.1.1 Process of Data Analysis

The process of data analysis is divided into three broad categories: questionnaire development, item quality analysis and structural equation modelling. Questionnaire development and exploratory factor analysis was discussed in details in the previous chapter 4.. Data was analysed using structural equation modelling. Structural equation modelling is chosen as a statistical method to analyse the data due to methodical and content-driven advantages. On a methodical front, structural equation modelling is the amalgamation of factor analysis and multiple regression analysis (Jais, 2007). On a content-level, SEM depicts the causal relationship between the antecedents. The relationships shown in structural equation modelling used to test the hypotheses.

5.2 Descriptive Analysis

As shown in above pie chart, out of the total respondents (N=1432), 1260 respondents (88%) are male and 172 respondents (12%) are female.

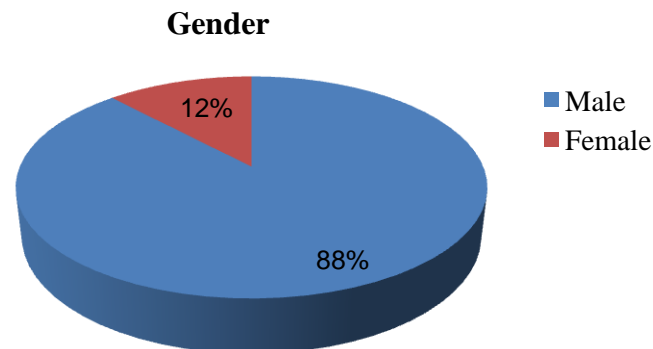


Figure 5.1: Respondents mix based on Gender

As shown in the pie chart, out of total population 401 (28%) students belongs to the family who runs or associated with some sort of business activities. 916 (64%) do not belong to a family with a business background.

Family own business

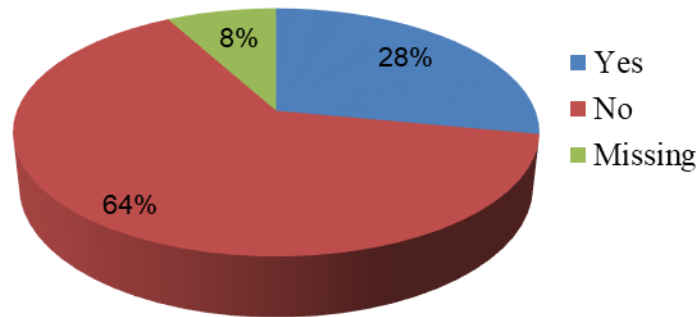


Figure 5.2: Respondents mix based on Family Own Business

As shown in a pie chart, five hundred eighty-eight (588) students indulge in courses related to entrepreneurship. Only one hundred students (100) have exposure to courses specific to social entrepreneurship. Four hundred students (400) do not have any exposure to entrepreneurial any other related courses.

Exposure to Entrepreneurial/social entrepreneurial Education

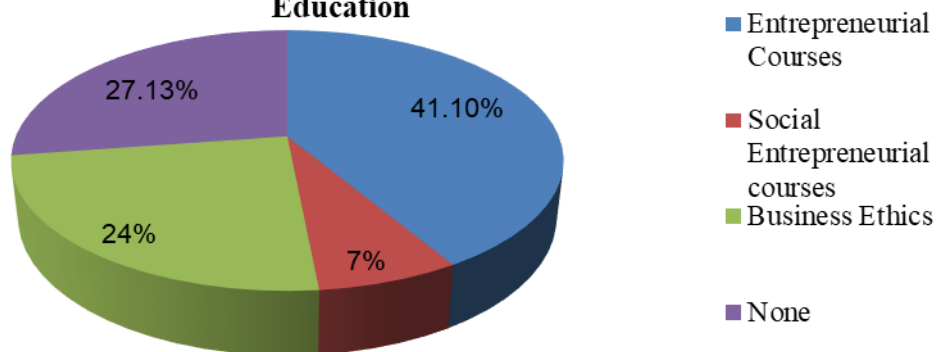


Figure 5.3: Respondents mix based on exposure to entrepreneurial/Social Education

5.3 Data Analysis

For data analysis, SPSS version 20 is used. According to Byrne (2010), SEM is a powerful amalgamation of multivariate statistical techniques. SEM identifies the

relationship between through the usage of two main sets of models viz. measurement models and structural models.

Measurement models used to test the accuracy of proposed measurements by evaluating the relationships between latent variables and their relevant indicators. The structural equation model generates the assessment of the hypothesised relationships between the latent variables, which further used for the testing of statistical hypotheses used for the purpose of the study.

Moreover, SEM considers the modelling of interactions, nonlinearities, correlated independents, measurement error, correlated error terms, and multiple latent independents each measured by multiple indicators. As shown from the above explanation SEM is profoundly infused with statistical jargon, predominantly concerning the types of variables hypothesised in the model. Some of the common terminologies used in SEM include:

- (i) Exogenous Variables –Independent variables that are not prejudiced by other variables in the model.
- (ii) Endogenous Variables - A dependent variable that is caused by other variables in the model
- (iii)Indicator Variables –These are the variables that are directly observed and measured (also known as visible variables in some circles).
- (iv)Latent Variables - Variables that cannot be measured directly.
- (v) Measurement Model - This is a subsection of complete structural equation model diagram hypothesised for the study together with all observations that load onto the latent variable, their relationships, variances, and errors.
- (vi)Structural Model- This is also a section of the total hypothesised SEM diagram, which comprises both latent and indicator variables.

(vii) Structural Equation Model – This is final model combines both measurement and structural model. It includes all the things that have been measured and observed among the variables examined.

5.3.1 Confirmatory Factor Analysis (Measurement Model)

Confirmatory factor analysis (CFA) is used to evaluate how well the measured antecedents represent the number of constructs. CFA and exploratory factor analysis are quite similar, but the basic difference between these techniques is that in EFA data is merely explored and provides information regarding numbers of factors required to characterise the data. Whereas in confirmatory factor analysis, all measured antecedents are related to the latent variable (Ullman, 2006). Confirmatory factor analysis (CFA) is a statistical technique used to confirm or reject the measurement theory. The CFA was carried out with Amos 20 using maximum likelihood as the estimation method.

As a first test model fit the chi-square (χ^2) value was calculated. The insignificant value of the χ^2 test signifies good fit model (Hu and Bentler, 1998). Absolute fit indices used to identify the relationship between a-priori model and sample data that demonstrate the superior fit models are the Chi-Squared test, GFI, AGFI, the RMR, and the RMSEA. The comparative fit index (CFI) is most used for fit indices. The value of CFI varies from 0 to one and rule of thumb for the perfect fit model is 0.90 (Cheung and Rensvold, 2002). Recommended values of the several indices are as follows:

- a. Goodness-of-fit statistic (GFI): The GFI ranges from 0 to 1, with values higher than 0.9 indicating a good fit to the data.
- b. The adjusted goodness-of-fit statistic (AGFI): Similar to GFI, values higher than 0.9 indicate a good fit model.

- c. Root mean square residual (RMR): For the perfect fit model RMR values <0.5 is ideal but values equal to 0.08 are considered acceptable (Bentler and Bonett, 1980).
- d. Root mean square error of approximation (RMSEA): RMSEA .08 to 0.10 indicates a mediocre fit and below 0.08 shows a good fit.

To evaluate common method variance, Harman's one-factor test was used to analyse whether a method bias induced single factor accounted for the covariance in the relationship between independent and dependent variables (Markland, 2007). After having controlled the factor analysis to only one variable it emerges that such a factor would account for no more than 25% of the variance. It highlighted that this value is well below the recommended 50% cut-off it can be understood that common method variance is not likely to create a problem in our research study.

Normality of data was tested using Shapiro-Wilk test value. If the Sig. the value of Shapiro-Wilk test is greater than 0.05 than data is considered as normally distributed and if it is lesser than 0.05, data is not considered as the normally distributed (Razali, *et al.*, 2011). In this research study, Shapiro-Wilk value was 0.538 with $df=0.02$. Therefore data is not normal. Beside this, there are three indices that are used to measure the normality of the data i.e. univariate kurtosis, univariate skewness and multivariate kurtosis. Although there are no standard consensuses regarding the acceptable limit for non-normality non-normal data of univariate kurtosis < 7 and univariate skewness < 2 are acceptable (Finney, *et. al*, 2006). Univariate skewness of each variable used in this research study was $<.994$ and univariate kurtosis value <1.552 in absolute values. Hence non-normality of the data set was not a problem for carrying out further analysis.

5.4 Results

Descriptive statistics and correlation are shown in table 10. These statistics showed that hypothesis are temporary supported. ATB($r=.45, p<.01$); Subjective norms($r=.39, p<.01$), perceived behavioural control($r=.47, p<.01$), innovativeness($r=.29, p<.01$), creativity($r=.38, p<.01$), proactivity($r=.36, p<.01$), emotional intelligence($r=.49, p<.01$), locus of control($r=.44, p<.01$), risk taking propensity($r=.39, p<.001$), empathy($r=.49, p<.01$), moral obligation($r=.48, p<.01$), social responsibility($r=.55, p<.01$), educational background($r=.29, p<.01$), perceived experience ($r=.57, p<.01$), self-efficacy($r=.37, p<.01$) and perceived social support($r=.65, p<.01$) were positively correlated with social entrepreneurial intention.

A confirmatory factor analysis (CFA) was also used to further evaluate the reliability and validity of the scales used in this research. Cronbach's coefficient alpha is mostly used as an estimator to measure the reliability of the constructs. But a stream of researchers criticised Cronbach's alpha being a lower bound and for this reason underestimating true reliability (Carmines and Zeller, 1979). Hence researchers recommend composite reliability calculated through confirmatory factor analysis as an efficient alternative to the Cronbach's alpha.

5.4.1 Reliability

The individual reliability of each indicator is derived by individual loading or correlations between items and constructs (λ). Researchers propose that a latent construct should elucidate a substantial part of each indicator's variance (by and large at least 50 percent). The similar to exploratory factor analysis in CFA also the standardised outer loadings should be greater than .60 (Hair *et al.*, 2006).

The scale reliability used to measure the internal consistency of all the indicators with respect to the construct. As mentioned earlier composite reliability (ρ_c) is considered as a better measurement tool than Cronbach's alpha (Henseler *et al.*, 2009). The acceptable limit for ρ_c is similar to that of Cronbach's alpha viz. should be above .70 whereas the value below .60 indicated the lack of reliability (Nunnally, 1978).

Table 5.1: Descriptive statistics (mean and standard deviation) and correlation of the variables used in the study

Constructs	Mean	SD	ATB	SN	PBC	Inno	Cre	Pro	EmInt	LOC	RTP	Emp	MO	SR	EdBkg	PExp	SeEff	PSS	SEI
ATB	6.90	0.938	0.818																
SN	5.83	0.412	0.11**	0.884															
PBC	6.85	0.876	0.37**	0.54**	0.943														
Inno	6.92	0.765	0.44**	-.19	.538**	0.904													
Cre	6.53	0.552	0.27**	0.22**	.439**	0.332*	0.903												
Pro	5.11	0.412	0.48**	0.45*	.63**	0.21*	0.71*	0.934											
EmInt	6.14	0.212	0.39**	-.56	-.18**	0.22**	0.19**	0.37**	0.892										
LOC	5.54	0.214	0.26**	.28**	.38**	0.17**	0.224**	0.141**	0.55*	0.952									
RTP	6.72	0.765	0.28**	.439*	0.146*	-.323	0.402**	-0.012	-.56*	0.215*	0.943								
Emp	6.66	0.145	0.33*	.33**	0.298*	0.17**	0.016*	0.043*	.46**	0.138*	0.21*	0.907							
MO	6.09	0.367	0.51**	0.51**	-.156*	0.36*	0.768	0.742**	0.439*	-.320	-.311	0.101*	0.941						
SR	6.89	0.320	0.43**	0.46**	0.34**	0.12**	0.241	0.417*	0.311**	0.326**	0.39**	0.14**	0.13*	0.949					
EdBkg	6.16	0.416	0.54**	0.276*	0.31**	0.421**	0.243	0.387**	.321**	0.308*	0.22*	0.41*	0.31**	0.88*	0.940				
PSP	5.55	0.451	0.51**	0.40*	0.226*	0.418*	0.547	0.398*	0.64**	0.512**	0.23**	0.417*	0.13*	0.25**	0.37*	0.891			
SeEff	6.77	0.452	0.49**	0.39**	.433*	0.315**	0.261	0.451*	0.45*	0.315*	0.51*	0.27**	0.47*	0.21*	0.35**	0.77*	0.896		
PSS	6.34	0.679	0.61**	0.21**	0.58**	0.444**	0.238	0.119*	0.21*	0.549**	0.01**	0.21*	0.21*	0.003*	0.019*	0.65*	0.45**	0.920	
SEI	6.82	0.721	0.45**	0.39**	0.45**	0.298**	0.387**	0.36**	0.49**	0.448**	0.39**	0.25**	0.48*	0.55**	0.29**	0.57**	0.37**	0.654**	0.924

Note: Diagonal elements are the square root of AVE between the constructs and their indicators. Off-diagonal elements are correlations: * $p < .05$; ** $p < .01$. For discriminant validity, diagonal elements should be greater than off-diagonal elements in the same row and column.

5.4.2 Convergent and Discriminant Validity

Convergent validity signifies the common variance between items and their constructs, and it represents that a set of indicators are measuring the same identified construct (Henseler *et al.*, 2009). Fornell and Larcker (1981) proposed that in order to measure the validity average variance extracted (AVE) should be used. The higher the value of AVE, the more representative the indicators are of the construct on which they load. In general, its value should be above .50 (Fornell and Larcker, 1981). As shown in Table 5.2, the AVE for each construct was acceptable.

To analyse the discriminant validity among constructs, the AVE square root should be higher than the squared correlation with all other constructs (Fornell and Larcker, 1981). Hence, each construct should share more variance with its own chunk of indicators than with another construct representing a different chunk of indicators (Henseler *et al.*, 2009). Table 5.2 shows the correlations between the constructs and, along with the diagonal, the AVE square roots. In view of this data, there is discriminant validity between constructs evaluated. All variables used in this research study showed a significant and positive correlation which is similar to the previous research studies (Ernst, 2011; Hockerts, 2014; Rueda *et al.*, 2015; Zeyen *et al.*, 2012).

Table 5.2: Composite reliabilities (ρ_c), and Average variance explained (AVE)

Construct	Composite reliabilities (ρ_c)	Average variance explained (AVE)
Attitude toward becoming a social entrepreneur	0.833	0.804
Subjective Norms	0.679	0.763
Perceived Behavioural control	0.917	0.689
Innovativeness	0.906	0.82
Creativity	0.938	0.860
Proactivity	0.912	0.677

Construct	Composite reliabilities (ρ_c)	Average variance explained (AVE)
Locus of control	0.652	0.714
Emotional intelligence	0.892	0.831
Risk taking propensity	0.873	0.879
Empathy	0.948	0.738
Moral obligation	0.812	0.911
Social responsibility	0.779	0.867
Entrepreneurial educational background	0.909	0.673
Previous experience to societal activities	0.853	0.793
Self-efficacy	0.885	0.896
Perceived social support	0.790	0.851
Social entrepreneurial intentions	0.789	0.886

Summary of derived statistics for measurement model is shown in Table 5.3. The χ^2 value was calculated and normally insignificant value of the χ^2 considered good for the fit model. χ^2/df was 19.63, ($\chi^2/df < 5.0$) which is considered acceptable model (Sewell, Jr., 1992). RMSEA value of the measurement model was 0.05 (90% confidence level) and RMR value was 0.04. Derived GFI value were 0.81 and AGFI=0.86. Comparative fit indices of measurement model was 0.91 and TLI=0.85. Therefore, it showed that model is moderately fit.

Table 5.3: Measurement Model

S.No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 1	2799.656	19.63	0.04	0.81	0.86	0.91	0.85	0.066	0.055

5.5 Structural Model

The hypotheses were tested through a series of models. The R^2 value is explained by the amount of variance in a dependent variable explained by one or more several independent variables along with the mediator variables (Kline, 2015). Therefore, the model that explains an improved amount of the variance of a dependent variable can be considered as more desirable.

Table 5.4: Summary of Hypothesized Models

Model	χ^2/df	RMSEA	SRMR	GFI	NNFI	CFI	AGFI
Hypothesized Model	6.01	0.059	0.055	0.93	0.97	0.95	0.90
Alt. Model 1 TPB construct \longrightarrow SEI	11.47	0.041	0.067	0.81	0.86	0.91	0.82
Alt. Model 2 Creativity \longrightarrow TPB Construct	20.67	0.059	0.065	0.84	0.85	0.92	0.88
Alt. Model 3 Proactivity \longrightarrow TPB Construct	26.92	0.058	0.051	0.79	0.84	0.83	0.88
Alt. Model 4 Innovativeness \longrightarrow TPB Construct	19.09	0.058	0.057	0.89	0.91	0.83	0.86
Alt. Model 5 Risk Taking Propensity \longrightarrow TPB Construct	15.62	0.055	0.049	0.82	0.84	0.91	0.86
Alt. Model 6 Emotional Intelligence \longrightarrow TPB Construct	22.78	0.059	0.050	0.91	0.89	0.92	0.81
Alt. Model 7 Internal Locus of Control \longrightarrow TPB Construct	11.89	0.050	0.048	0.89	0.85	0.80	0.78
Alt. Model 8 Empathy \longrightarrow TPB Construct	10.91	0.050	0.051	0.91	0.81	0.89	0.90
Alt. Model 9 Moral obligation \longrightarrow TPB Construct	17.62	0.059	0.048	0.79	0.80	0.74	0.78
Alt. Model 10 Social Responsibility \longrightarrow TPB Construct	22.11	0.061	0.061	0.73	0.75	0.79	0.74
Alt. Model 11 Ent/Social Ent Edu \longrightarrow TPB Construct	23.16	0.062	0.052	0.75	0.80	0.79	0.76
Alt. Model 12	20.11	0.056	0.056	0.83	0.85	0.89	0.91

Model	χ^2/df	RMSEA	SRMR	GFI	NNFI	CFI	AGFI
Previous Exposure → TPB Construct							
Alt. Model 13 Self-efficacy →TPB Construct	18.53	0.051	0.055	0.90	0.95	0.91	0.89
Alt. Model 14 Perceived social support →TPB Construct	16.94	0.056	0.073	0.83	0.91	0.84	0.81

The **first model tests** the relationship between mediators' viz. attitude toward becoming a social entrepreneur, subjective norms and perceived behavioural control with social entrepreneurial intention. **Hypothesis (H1.1)** i.e. attitude toward becoming social entrepreneur showed the positive significant relationship of medium value ($\beta=.74^{***}$). **Subjective norms (H1.2)** highlighted the positive significant relationship of small size ($\beta=.44^{***}$). The result of subjective norms was similar to previous entrepreneurial intention studies (Engle et al., 2010; Heuer and Liñán, 2013; Rueda, Moriano, and Liñán, 2015) where subjective norms showed the lowest effect on entrepreneurial intention. **Perceived behavioural control (H1.3)** disclosed the strongest impact on social entrepreneurial intention ($\beta=.88^{***}$). Alternative Model 1 showed acceptable fit to the data ($\chi^2/df=11.47$; RMSEA=0.041; SRMR=0.067; NNFI=0.86; CFI=0.85; AGFI=0.82). In order to test the proposed hypotheses, we used a series of models (shown in Roman numbers) in order to correctly measure the effects and avoid interrelation of the constructs.

Table (i): Model1-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 1	999.656	11.47	0.04	0.81	0.86	0.91	0.85	0.066	0.055

Model 2 was used to test the effect of **creativity** on **attitude toward becoming a social entrepreneur (H2.1)**, **subjective norms (H2.2)** and **perceived behavioural control (H2.3)**. Creativity showed a strong positive significant relationship with the attitude toward becoming a social entrepreneur ($\beta=0.54^{**}$, $p<0.05$) and perceived behavioural control ($\beta=.62^{**}$, $p<0.05$) respectively. Innovativeness showed an insignificant relationship with subjective norms ($\beta=-.443$, $p=.235$). Alternative Model 2 showed acceptable fit to the data.

Table (ii): Model 2-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 2	1933.656	20.67	0.06	0.84	0.88	0.92	0.75	0.066	0.059

Model 3 was used to test the relationship between **proactivity and the attitude toward becoming a social entrepreneur (H3.1)**, **subjective norms (H3.2)** and **social entrepreneurial intentions (H3.3)**. Proactivity showed the statistically significant relationship of medium impact with both the attitude toward becoming a social entrepreneur ($\beta=0.63^{**}$, $p<0.01$), and perceived behavioural control ($\beta=0.71^{**}$, $p<0.01$) and insignificant relationship with subjective norms ($\beta=-0.864$, $p=.752$) Model 3 showed acceptable fit to the data.

Table (iii): Model 3-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 3	2535.90	26.92	0.051	0.79	0.83	0.88	0.79	0.064	0.058

Model 4 was used to test the relationship between **innovativeness and the attitude toward becoming a social entrepreneur (H4.4), subjective norms (H4.2) and social entrepreneurial intentions (H4.3)**. Innovativeness showed the statistically significant relationship of medium impact with both the attitude toward becoming a social entrepreneur ($\beta=0.59^{**}$, $p<0.01$), and perceived behavioural control ($\beta=0.58^{**}$, $p<0.01$) and insignificant relationship with subjective norms ($\beta=-.334$, $p=.553$) Model 4 showed acceptable fit to the data.

Table (iv): Model 4-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 4	2535.90	19.09	0.057	0.89	0.86	0.88	0.79	0.064	0.055

Model 5 was used to test the relationship between **risk-taking propensity and the attitude toward becoming a social entrepreneur (H5.1), subjective norms (H5.2) and social entrepreneurial intentions (H5.3)**. Risk taking propensity showed the statistically significant positive relationship of medium impact with the attitude toward becoming a social entrepreneur ($\beta=0.42^{**}$, $p<0.01$), and low impact with subjective norms ($\beta=0.08^{**}$, $p<0.01$) and insignificant relationship with perceived behavioural control ($\beta=-.126$, $p=.362$) Model 5 showed acceptable fit to the data.

Table (v): Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 5	2201.43	15.62	0.049	0.82	0.86	0.91	0.88	0.061	0.055

Model 6 was used to test the relationship between **emotional intelligence and the attitude toward becoming a social entrepreneur (H6.1), subjective norms (H6.2) and social entrepreneurial intentions (H6.3)**. Emotional intelligence showed the statistically significant positive relationship with the attitude toward becoming a social entrepreneur ($\beta=0.55^{**}$, $p<0.01$), subjective norms ($\beta=0.19^{**}$, $p<0.01$) and perceived behavioural control ($\beta=-.126$, $p=.62$) Model 6 showed acceptable fit to the data.

Table (vi): Model 6-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 6	2801.49	22.78	0.050	0.91	0.81	0.92	0.84	0.071	0.059

Model 7 was used to test the relationship between **locus of control and the attitude toward becoming a social entrepreneur (H7.1), subjective norms (H7.2) and social entrepreneurial intentions (H7.3)**. Locus of control showed the statistically significant positive relationship with the attitude toward becoming a social entrepreneur ($\beta=0.58^{**}$, $p<0.01$) and subjective norms ($\beta=0.11^{**}$, $p<0.01$) and showed a statistically insignificant relationship with perceived behavioural control ($\beta=-.208$, $p=.155$) Model 7 showed acceptable fit to the data.

Table (vii): Model 7-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 7	1517.34	11.89	0.048	0.89	0.78	0.80	0.81	0.077	0.051

Model 8 was used to test the relationship between **empathy and the attitude toward becoming a social entrepreneur (H8.1), subjective norms (H8.2) and social entrepreneurial intentions (H8.3)**. Empathy showed the statistically significant positive relationship with the attitude toward becoming a social entrepreneur ($\beta=0.77^{**}$, $p<0.01$) and perceived behavioural control ($\beta=0.74^{**}$, $p<0.01$) and also showed a statistically significant relationship with subjective norms ($\beta=.69$, $p<0.01$) Model 8 showed acceptable fit to the data.

Table (viii): Model 8-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 8	1517.34	10.91	0.051	0.91	0.90	0.89	0.91	0.066	0.050

Model 9 was used to test the relationship between **moral obligation and the attitude toward becoming a social entrepreneur (H9.1), subjective norms (H9.2) and social entrepreneurial intentions (H9.3)**. Moral obligation showed the statistically significant positive relationship with the attitude toward becoming a social entrepreneur ($\beta=0.61^{**}$, $p<0.01$) and perceived behavioural control ($\beta=0.63^{**}$, $p<0.01$) and showed a statistically insignificant relationship with subjective norms ($\beta=-.602$, $p=.236$) Model 9 showed acceptable fit to the data.

Table (ix): Model 9-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 9	1899.75	17.62	0.048	0.79	0.78	0.74	0.81	0.076	0.059

Model 10 was used to test the relationship between **social responsibility and the attitude toward becoming a social entrepreneur (H10.1), subjective norms (H10.2) and social entrepreneurial intentions (H10.3)**. Social responsibility showed the statistically significant positive relationship with all the three moderators i.e. the attitude toward becoming a social entrepreneur ($\beta=0.38^{**}$, $p<0.01$), subjective norms ($\beta=0.41$, $p<0.01$) and perceived behavioural control ($\beta=0.33^{**}$, $p<0.01$). Model 10 showed acceptable fit to the data.

Table (x): Model 10-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 10	2228.07	22.11	0.061	0.73	0.74	0.79	0.82	0.077	0.061

Model 11 was used to test the relationship between **entrepreneurial/social educational background and the attitude toward becoming a social entrepreneur (H11.1), subjective norms (H11.2) and social entrepreneurial intentions (H11.3)**. Entrepreneurial/social educational background showed the statistically significant positive relationship with all the three moderators i.e. the attitude toward becoming a social entrepreneur ($\beta=0.13^{**}$, $p<0.01$), subjective norms ($\beta=0.15$, $p<0.01$) and perceived behavioural control ($\beta=0.20^{**}$, $p<0.01$). Model 11 showed acceptable fit to the data.

Table (xi): Model 11-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 11	1907.64	23.16	0.052	0.75	0.76	0.79	0.78	0.066	0.062

Model 12 was used to test the relationship between **previous experience to societal activities and the attitude toward becoming a social entrepreneur (H12.1), subjective norms (H12.2) and social entrepreneurial intentions (H12.3)**. Previous experience to societal activities showed the statistically significant positive relationship with the attitude toward becoming a social entrepreneur ($\beta=0.45^{**}$, $p<0.01$), and perceived behavioural control ($\beta=0.50^{**}$, $p<0.01$) and insignificant relationship with subjective norms ($\beta=-.215$, $p=.393$). Model 12 showed acceptable fit to the data.

Table (xii): Model 12-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 12	1907.64	20.11	0.056	0.83	0.91	0.89	0.78	0.066	0.064

Model 13 was used to test the relationship between **self-efficacy and the attitude toward becoming a social entrepreneur (H13.1), subjective norms (H13.2) and social entrepreneurial intentions (H13.3)**. Self-efficacy showed a high statistically significant positive relationship with the attitude toward becoming a social entrepreneur ($\beta=0.79^{**}$, $p<0.01$) subjective norms ($\beta=.66$, $p<.01$) and perceived behavioural control ($\beta=0.81^{**}$, $p<0.01$). Model 13 showed a good fit to the data.

Table (xiii): Model 13-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 13	2915.37	18.53	0.055	0.90	0.89	0.91	0.92	0.061	0.051

Model 14 was used to test the relationship between **perceived social support and the attitude toward becoming a social entrepreneur (H14.1), subjective norms (H14.2) and social entrepreneurial intentions (H14.3)**. Perceived social support showed a high statistically significant positive relationship with the attitude toward becoming a social entrepreneur ($\beta=0.72^{**}$, $p<0.01$), and perceived behavioural control ($\beta=0.75^{**}$, $p<0.01$). Perceived social support showed a statistically weak relationship with subjective norms ($\beta=.12^{**}$, $p<.01$). Model 14 showed a good fit to the data.

Table (xiv): Model 14-Goodness-of-Fit Indexes for the Structural Equation Model

S. No.	Model fit		Absolute measures			Incremental fit measures		Parsimoniousfit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 14	2903.71	16.94	0.073	0.83	0.81	0.84	0.79	0.059	0.056

The findings of the overall tested models shown in figure 5.4, 5.5 and 5.6.

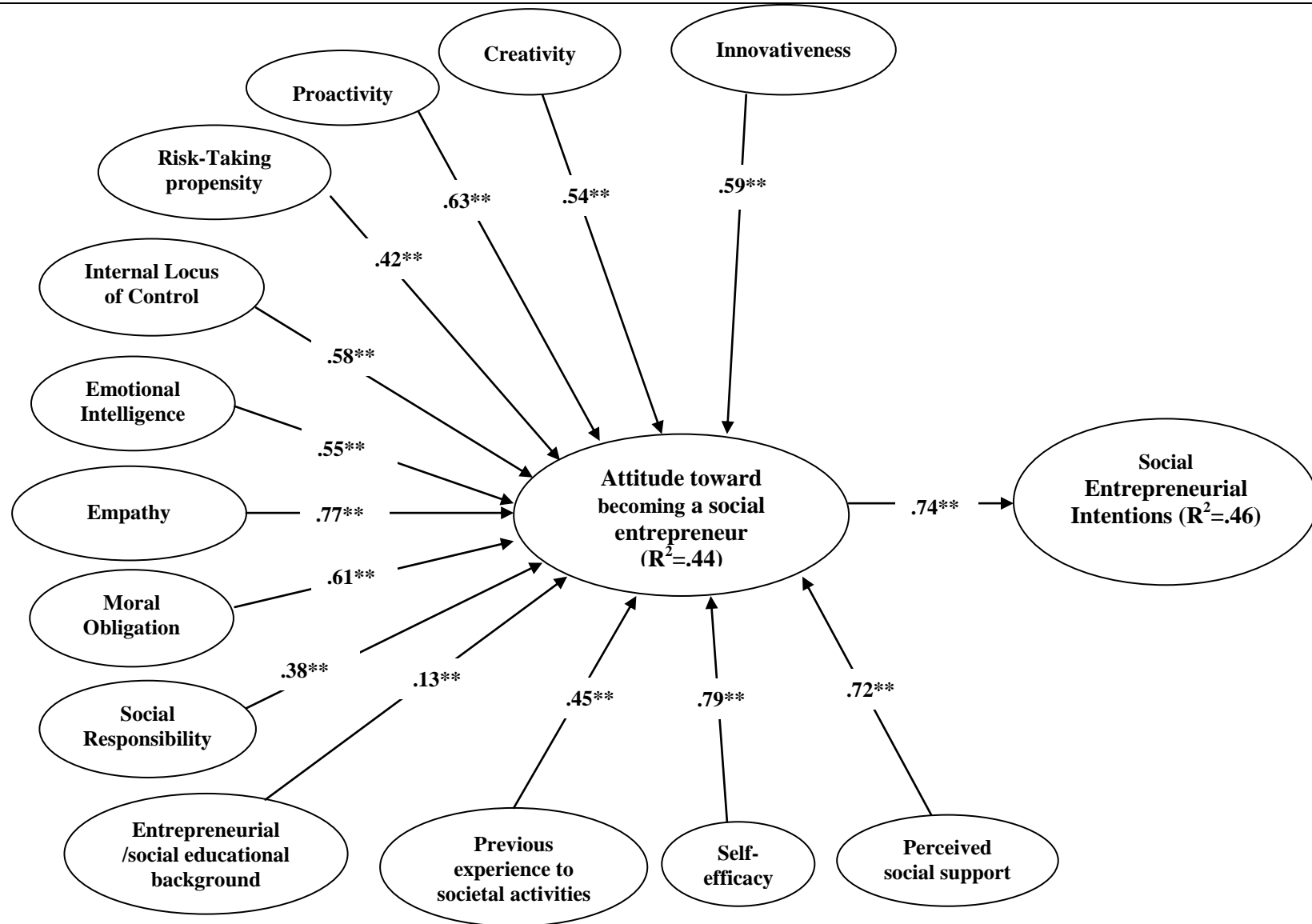


Figure 5.4: Structural Model for Effect of antecedents on attitude toward becoming a social entrepreneur

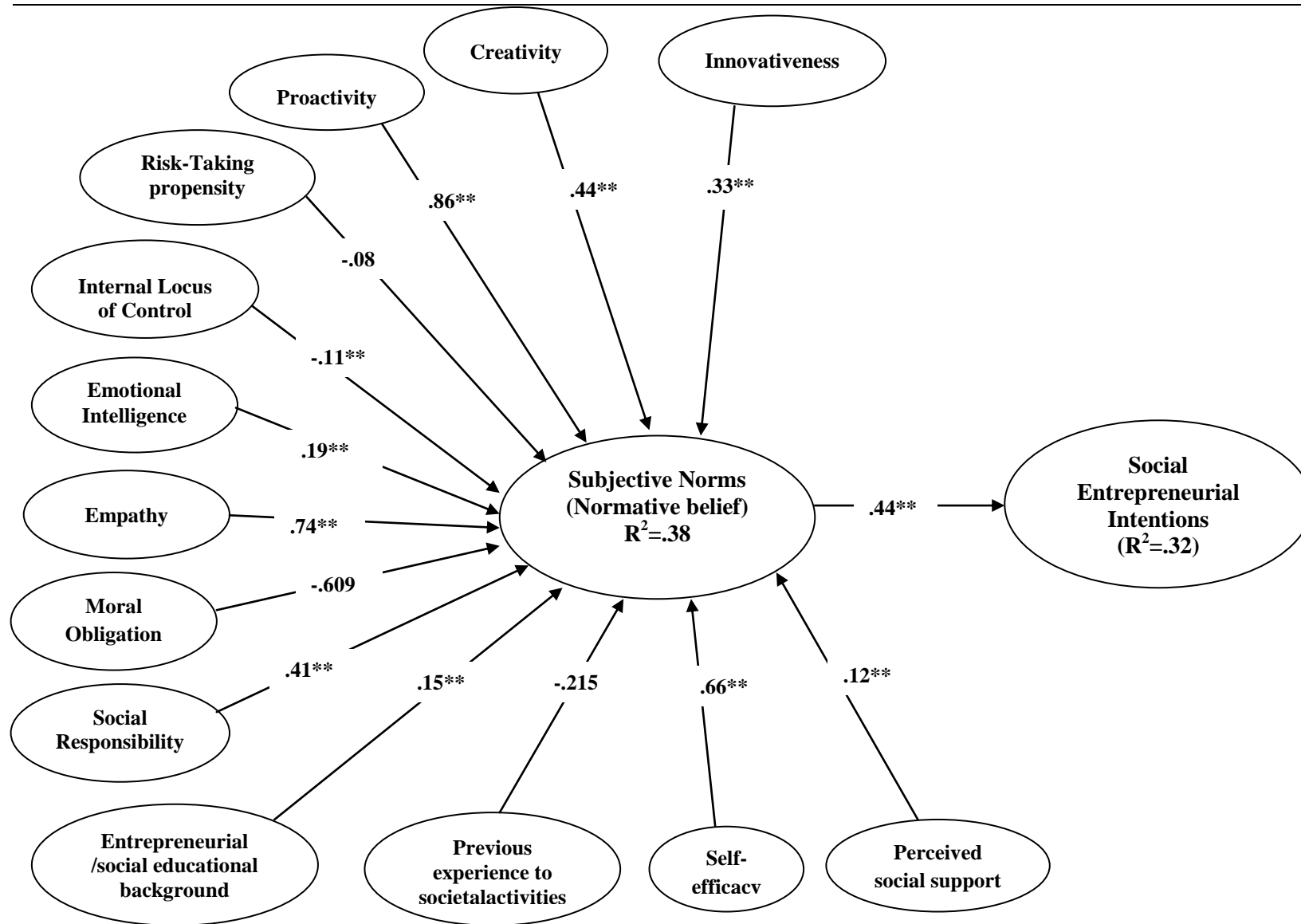


Figure 5.5: Structural Model for Effect of antecedents on Subjective Norms (Normative Belief)

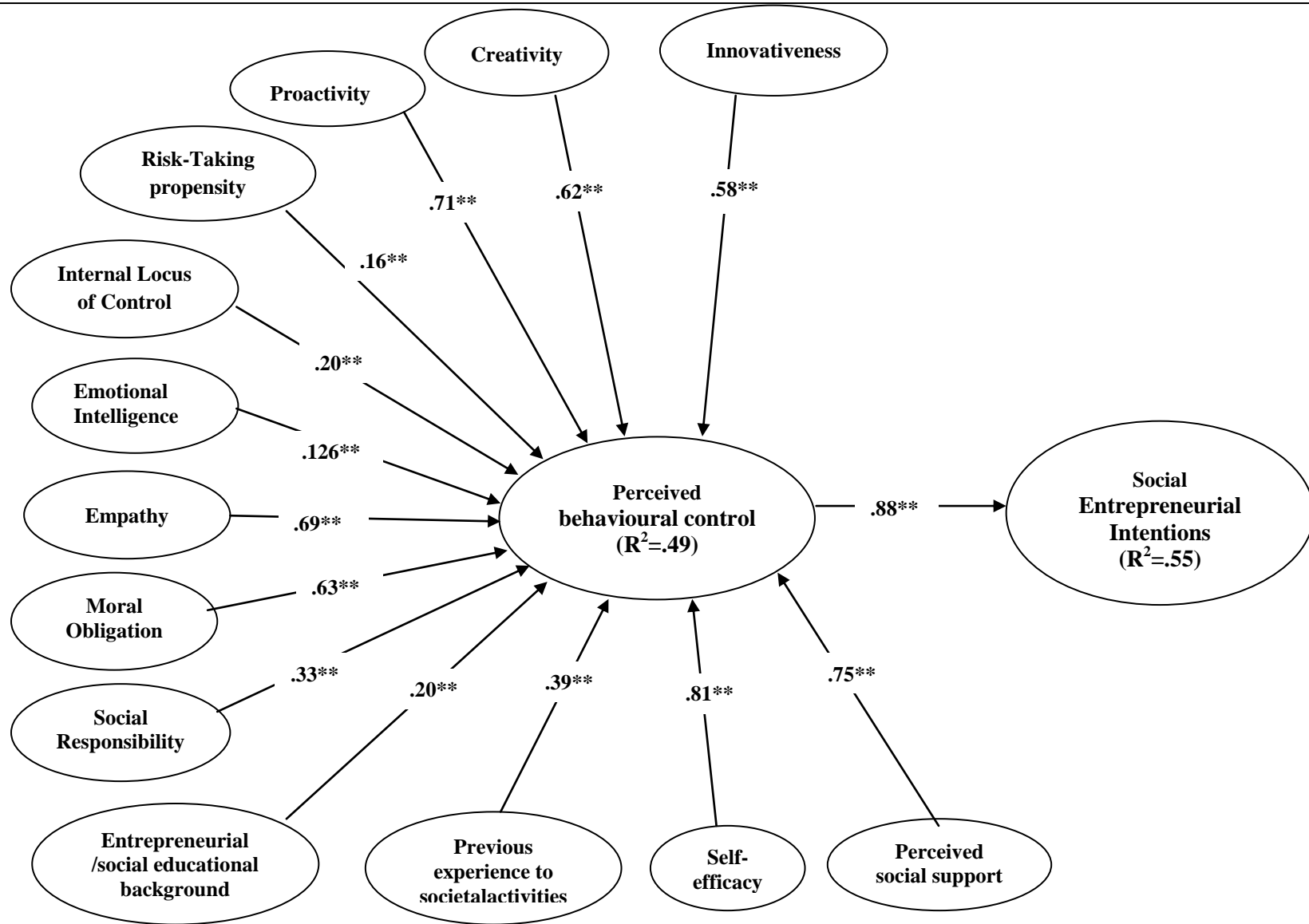


Figure 5.6: Structural Model for Effect of antecedents on Perceived behavioural control

Table 5.5: Overview of Hypotheses

Hypothesis No.	Hypothesis	Hypothesis accepted?
1.1	Attitude towards becoming a social entrepreneur has a positive impact on social entrepreneurial intentions	Yes
1.2	Subjective Norms (Normative belief) have a positive impact on social entrepreneurial intentions	Yes
1.3	Perceived behavioural control has a positive impact on social entrepreneurial intentions	Yes
2.1	Creativity has a positive impact on attitude towards becoming a social entrepreneur	Yes
2.2	Creativity has a positive impact on subjective norms (Normative Belief)	No
2.3	Creativity has a positive impact on perceived behavioural control	Yes
3.1	Proactivity has a positive impact on attitude toward becoming a social entrepreneur.	Yes
3.2	Proactivity has a positive impact on subjective norms (Normative belief)	No
3.3	Proactivity has a positive impact on perceived behavioural control	Yes
4.1	Innovativeness has a positive impact on attitude toward becoming a social entrepreneur	Yes
4.2	Innovativeness has a positive impact on subjective norms (Normative Belief)	No
4.3	Innovativeness has a positive impact on perceived behavioural control	Yes
5.1	Risk-taking propensity has a positive impact on attitude toward becoming a social entrepreneur	Yes
5.2	The risk-taking propensity has a positive impact on subjective norms	Yes
5.3	Risk-taking propensity has a positive impact on perceived behavioural control	No
6.1	Emotional Intelligence is positively related to attitude toward becoming a social entrepreneur	Yes
6.2	Emotional Intelligence is positively associated with subjective norms (Subjective Norms)	Yes
6.3	Emotional Intelligence has a positive impact on perceived behavioural control	Yes
7.1	Internal Locus of Control has a positive impact on attitude toward becoming a social entrepreneur	Yes
7.2	Internal Locus of Control has a positive impact on subjective norms (Normative belief)	Yes
7.3	Internal Locus of Control has a positive impact on perceived behavioural control	No
8.1	Empathy has a positive impact on attitude toward becoming a social entrepreneur	Yes
8.2	Empathy has a positive impact on subjective	Yes

Hypothesis No.	Hypothesis	Hypothesis accepted?
	norms(Normative belief)	
8.3	Empathy has a positive impact on perceived behavioural control	Yes
9.1	Moral obligation has a positive impact on attitude toward becoming a social entrepreneur	Yes
9.2	Moral obligation has a positive impact on subjective norms (Normative belief)	No
9.3	Moral obligation has a positive impact on perceived behavioural control	Yes
10.1	Social responsibility has a positive impact on attitude toward becoming a social entrepreneur	Yes
10.2	Social responsibility has a positive impact on subjective norms (Normative belief)	Yes
10.3	Social responsibility has a positive impact on perceived behavioural control	Yes
11.1	Prior exposure to social entrepreneurial activities has a positive impact on attitude toward becoming a social entrepreneur	Yes
11.2	Prior exposure to social entrepreneurial activities has a positive impact on subjective norms (Normative belief)	No
11.3	Prior exposure to social entrepreneurial activities has a positive impact on perceived behavioural control	Yes
12.1	Entrepreneurial educational background has a positive impact on attitude toward becoming a social entrepreneur	Yes
12.2	Entrepreneurial educational background has a positive impact on subjective norms (Normative Belief)	Yes
12.3	Entrepreneurial educational background has a positive impact on perceived behavioural control	Yes
13.1	Self-Efficacy has a positive impact on attitude toward becoming a social entrepreneur	Yes
13.2	Self-Efficacy has a positive impact on subjective norms (Normative belief)	No
13.3	Self-Efficacy has a positive impact on perceived behavioural control	Yes
14.1	Perceived social support has a positive impact on attitude toward becoming a social entrepreneur	Yes
14.2	Perceived social support has a positive impact on subjective norms.(Normative belief)	Yes
14.2	Perceived social support has a positive impact on perceived behavioural control	Yes

5.6 Discussion of Findings

The results and the findings obtained are discussed in this section.

5.6.1 The Effect of Attitude towards Becoming a Social Entrepreneur, subjective norms (normative belief) and perceived behavioural control - Social Entrepreneurial Intentions

Attitude towards behaviour refers to the degree to which the individual has favourable or unfavourable assessments of the behaviour in question (Iakovleva and Kolvereid, 2009). The result of the study shows that attitude towards becoming a social entrepreneur showed a strong positive relationship ($\beta=0.74$, $p<.01$) with the social entrepreneurial intention (as shown in fig. 5.4). This depicts that the higher the attitude towards becoming a social entrepreneur, the higher the social entrepreneurial intention. An attitude towards becoming a social entrepreneurial so showed a strong positive significant relationship with social entrepreneurial intentions.

If we compare the results of this research studies with the results of previous studies in the field of entrepreneurship these results are consistent with do Paço *et al.*, (2011); Ferreira, *et al.*, (2012); Iakovleva and Kolvereid, (2009); Kolvereid *et al.*, (2009).; Walter and Dohse, (2009) which highlighted the strong significant relationship between attitude towards becoming entrepreneurs with entrepreneurial intentions. Ernst (2011) study in the field of social entrepreneurial intentions also found similar results in which attitude towards becoming social entrepreneurs showed a strong relationship with social entrepreneurial intentions.

The results showed a significant relationship between subjective norm and social entrepreneurial intention with a moderate coefficient of 0.44. Researchers have obtained p-value $0.000 < 0.01$ which means that there is a significant relationship between subjective norm and social entrepreneurial intention. This is supported by Heuer

and Liñán, (2013); Kolvereid and Isaksen, (2006); Rueda *et al.*, (2015). Subjective norms have always been considered a conflicting element in the theory of planned behaviour. Meta-analysis study conducted by (Armitage and Conner 2001) found subjective norms as a weak predictor of entrepreneurial intentions. In a previous research study Ernst (2011) found out no direct relationship between subjective norms and social entrepreneurial intention but in our research study, subjective norms have emerged as a strong factor that showed a significant positive relationship with both antecedents and attitudes. The basic novelty of this research study is that it has tried to club antecedents in order to find out the relationship with the corresponding mediator.

Some antecedents also showed an insignificant or negative relationship with the subjective norms. This means that even if social pressure to become a social entrepreneur is present, this does not directly alter the social entrepreneurial intention of the subject. The decision to become a social entrepreneur is one based on one's own evaluations, rather than the approval of third parties. Hence, rather than directly changing people's intentions on becoming a social entrepreneur, the external approval of such a career choice leads people to see it in a more favourable light.

Based on the results of this study, there is a significant relationship between perceived behavioural control and social entrepreneurial intention. The supporting statistical data shows that moderate positive correlation of 0.88 exists between perceived behavioural control and social entrepreneurial intention. This can be explained that the higher the perceived behavioural control of a person, the greater the social entrepreneurial intention. The high level of perceived behavioural control shows that those people who believe they would be able to become social entrepreneurs in a self-determined approach have higher intentions of becoming social entrepreneurs than those who don't believe they could. Self-assurance and willpower are, therefore, important for developing strong social entrepreneurial intentions.

5.6.2 The Effect of Personality Traits on Attitude toward becoming a social entrepreneur, Subjective Norms (Normative belief) and Perceived Behavioural Control

The critical antecedents of personality traits are creativity, proactivity, and innovativeness, internal locus of control, risk-taking propensity and emotional intelligence. The results of the research study showed that personality traits have strong positive relationship toward attitude towards becoming a social entrepreneur. Among personality, traits proactivity showed the strongest relationship with attitude towards becoming a social entrepreneur ($\beta=.63$) followed by innovativeness ($\beta=.59$) followed by an internal locus of control ($\beta=.58$) followed by emotional intelligence ($\beta=.55$) followed by creativity ($\beta=.42$) followed by ($\beta=.42$). In comparison to previous research studies of Ernst(2011) and Nga and Shamuganathan, (2010) the results of this research studies provide a better picture in relation to the effect of personality traits on the development of social entrepreneurial intentions. In both Ernst(2011) and Nga and Shamuganathan, (2010) personality traits do not show any relationship with the social entrepreneurial intentions.

Personality traits like creativity ($\beta=.44$), proactivity ($\beta=.86$), innovativeness ($\beta=.33$) and emotional intelligence ($\beta=.19$) showed a significant relationship with the subjective norms (normative belief). These results provide empirical evidence to the argument of Leadbetter (1997), who highlighted the fact that social entrepreneurs may hold higher levels of creativity, innovativeness, and proactivity than traditional entrepreneurs. When considering this notion realistically, it seems a logical suggestion; in the case of social entrepreneurs to be successful, they may have too limited resources within tighter parameters than entrepreneurs and should triumph over societal pressure by providing a creative and innovative solution to the most basic problems. Whereas

personality traits like locus of control ($\beta=-.11$), and risk-taking propensity ($\beta=-.08$) showed an insignificant relationship with the subjective norms (normative belief). As suggested by the researchers in the field of entrepreneurship that subjective norms have a propensity to contribute more weakly to intention (Armitage and Conner 2001) for a person with strong internal locus of control (Ajzen 2002) than for those with a strong action orientation (Poon, 2006). Therefore, those students who have a high internal locus of control and high risk taking ability are able to analyse and control the situation more independently. For them, the pressure exerted by the important people who might influence the decision-making process regarding social venture creation affects weakly (Linan, 2009).

In personality traits creativity ($\beta=.62$), proactivity ($\beta=.71$), internal locus of control ($\beta=.20$), innovativeness ($\beta=.58$) and emotional intelligence ($\beta=.12$) all antecedents showed a strong positive relationship with perceived behavioural control. The result of this study is similar to the previous research studies in the field of entrepreneurship. (Gorman *et al.*, 1997; Feldman and Bolino, 2000; Hamidi *et al.*, 2008) discovered that high personality traits like creativity scores exert a positive influence on the process of the intention formation. Creativity is one of the most crucial factors in play in the formation of the entrepreneurial intention. In addition to impacting the intention process, personality traits are also supportively related to the preference of an individual of choosing his career with entrepreneurship (Zampetakis *et al.*, 2009; Zampetakis and Moustakis 2006). Personality traits are an integral and eternal component of social entrepreneur personality. It is true that it is the social entrepreneur who takes bold and creative steps but creativity is in turn encouraged by situations. In this sense, the literature on personality traits stresses the role of networks in transmitting values and

norms which, in turn, would affect motivations. Therefore, these links should be explored further.

5.6.3 Effect of Pro-Social Personality traits on Attitude toward becoming a social entrepreneur, Subjective Norms(Normative belief) and perceived behavioural control

Prosocial Personality traits have positive relationship toward attitude toward becoming a social entrepreneur. Empathy showed the strongest relationship with attitude towards becoming social entrepreneurial intentions ($\beta=.77$) followed by moral obligation ($\beta=.61$) followed by social responsibility ($\beta=.38$). This reflects that strong ethical fibre helpful for the development of attitude towards becoming a social entrepreneur. Empathy showed the strongest relationship with attitude toward becoming a social entrepreneur. This means that the ability to understand and share the feelings and pain of others can play an important role in the development of attitude and social entrepreneurial intentions.

In the literature of social entrepreneurship, empathy is always considered as the debatable antecedent. In the first theoretical model of social entrepreneurial intentions, Mair and Noboa (2006) said that a presence strong ethical fibre is required to go for social entrepreneurship. But in Ernst (2011) study not only empathy showed insignificant relationship but also showed a negative relationship with the social entrepreneurial intention. Hockert's (2014) conducted a research study on two different samples. In the first study of Heckert's empathy does not show any relationship with social entrepreneurial intentions whether in second study empathy showed a significant relationship with social entrepreneurial intentions. Therefore, through the results of this results of this research study, we provide the empirical evidence to the Mair and Noboa

(2006) model that empathy and moral obligation helpful in developing social entrepreneurial intentions.

Prosocial personality traits like empathy ($\beta=.74$) and social responsibility ($\beta=.41$) showed a significant relationship with the subjective norms (normative belief) whereas moral obligation showed the insignificant relationship ($\beta=-.609$). This highlighted that the general characteristic of understanding others feeling and the need to help those in grief affect the social pressure they perceive to go for social entrepreneurship as a career path. It is explicable that those people who strive to “do well” attracted toward those jobs which enable them to pursue this goal. One possible explanation for these results is that those people who have a high empathetic nature and sense of social responsibility are also more socially conscious and, hence, perceive higher levels of social pressure. Another explanation could be that social responsibility often shoots from being raised in an environment that inherits the values of acting in a socially acceptable manner. If this leads to empathy and social responsibility within the subject, it may be hopeful of admiration from their family if they opt for socially oriented career path which fulfils the value they inherited. Hence, they could perceive higher levels of social sanction of a choice to become a social entrepreneur. These lines of arguments can make clear about the positive effect of empathy and social responsibility on subjective norms and offer room for future research work to understand this link.

All the three antecedents of prosocial personality trait viz. empathy ($\beta=.69$), moral obligation ($\beta=.63$), and social responsibility ($\beta=.33$) showed a significant relationship with the perceived behavioural control. Hence, the ability to understand and evaluate the emotions of others, a moral obligation to help underprivileged people and sense of responsibility proved helpful in developing the perceived ability of the individual in

order to start his/her own social venture. This is the first study that tried to measure the direct link between prosocial personality traits with perceived behavioural control

5.6.4 The Effect of Social Factors on Attitude toward becoming a social entrepreneur, Subjective Norms(Normative belief) and Perceived Behavioural Control

This research results showed that there is significant positive and moderate relationship between entrepreneurship education ($\beta=.13$) and previous experience with societal activities ($\beta=.13$). The finding of this research proved that entrepreneurship education and social entrepreneurial intention is positively related. This is because that courses related to entrepreneurship/social entrepreneurship education have equipped the students with necessary entrepreneurial skills and knowledge by preparing them to deal with uncertainty in future by helping them to be an entrepreneur/social entrepreneur. Previous exposure to entrepreneurial activities helpful as they provide the basic knowledge regarding management of the firm, minimising risk barriers leading to increase their capability in managing their business venture in future and improve their attitude towards entrepreneurship, in turn, increase their social entrepreneurial intention. Prior knowledge about social problems has also been found to predict attitudes towards social entrepreneurial intent. Hence, perceived knowledge, whether it be from work experience, education or other areas, in entrepreneurship and/or the socially relevant fields of work, not only leads people to perceive becoming a social entrepreneur as more attractive, it also makes them more secure in their abilities to become one.

The entrepreneurial educational background showed positive relations with subjective norms ($\beta=.15$) whereas previous exposure to entrepreneurial activities showed an insignificant relationship with subjective norms ($\beta=-.215$).The study shows that students who have taken entrepreneurship/social courses in university, in general,

reported more intention towards social entrepreneurship than engineering students who have not taken entrepreneurship course. Specifically, students who had previous exposure to courses to entrepreneurship education showed more personal desirability toward entrepreneurship. Entrepreneurial courses also helpful in developing strong internal locus of control and increases self-efficacy for engineering students who have enrolled in entrepreneurship courses. Previous experience to societal activities showed an insignificant relationship with the subjective norms. The insignificant of the relationship between these variables is due to the speedy changes in social environment, family, friends and peer groups might not able to influence individuals in making decision choices. Individuals will also consider the role of various other external forces like prior knowledge and societal experience, financial support, and governmental policies before creating their own social venture.

Both Entrepreneurship education and previous exposure to entrepreneurial activities showed a positive relationship with perceived behavioural control with ($\beta=.20$) and ($\beta=.39$) respectively. The results confirm the key role played by entrepreneurship education in inspiring young student's fondness towards social entrepreneurship and signify that universities and higher learning institutions are a podium for developing and exploring potential social entrepreneurs. The results also suggest that interventions that transport individuals in direct contact with social problems are likely to bring out an increase in perceived ability and intentions.

5.6.5 The Effect of Enablers on Attitude toward becoming a social entrepreneur, Subjective Norms (Normative Belief) and Perceived Behavioural Control

This research results showed that there is a significant positive relationship between self-efficacy ($\beta=.79$), perceived social support ($\beta=.72$) and attitude toward becoming a social entrepreneur. Self-efficacy is one of the most used antecedents in both entrepreneurial

and social entrepreneurial intentions studies. Self-efficacy was found to be the strongest predictor of entrepreneurial intention. The findings regarding self-efficacy and social entrepreneurial intention are in line with the findings of the previous study which stated that self-efficacy has been found to be significantly related to stated occupational interests and occupational choice among college students (Boyd and Vozikis 1994). Hockert's (2015) find out that social entrepreneurial self-efficacy showed a strong significant relationship with the social entrepreneurial intention. The importance of self-efficacy in order to predict social entrepreneurial intention was also proved by Forster and Grichnik (2013) and Ernst (2011). Self-efficacy plays an important role in deciding students' aspirations that are measured through their self-belief and ability to opt for the sustainable social idea for the development of social entrepreneurial activities that they want to pursue. Perceived social support also showed a strong relationship with the attitude. In this context support systems and networks such as Ashoka or the Schwab Foundation can possibly play an important role in developing an attitude toward social en Entrepreneurship education affects positively on perceived behavioural control, which significantly increased social entrepreneurial intentions. The results confirm the key role played by entrepreneurship education in inspiring young student's fondness towards social entrepreneurship and signify that universities and higher learning institutions are a podium for developing and exploring potential social entrepreneurs. The results also suggest that interventions that transport individuals in direct contact with social problems are likely to bring out an increase in perceived ability and intentions.

Self-efficacy ($\beta=.66$) and perceived social support ($\beta=.12$) both showed a significant positive relationship with the subjective norms. Krueger and Dickson (1994) highlighted that high levels of self-efficacy are linked with tactical risk taking while Krueger *et al.*, (2000) argued that self-efficacy is a critical and an important antecedent

of entrepreneurial intentions. Individuals with high self-efficacy have more inherent interests in entrepreneurial activities and are more enthusiastic to make necessary efforts and show determination when faced with hindrances and setbacks. Therefore, the result of this study suggested that students with high self-efficacy and presence of an environment that is supportive will affect the perceived social pressure more positively.

Higher levels of self-efficacy ($\beta=.81$) and perceived social support ($\beta=.75$) also lead to higher levels of perceived behavioural control and social entrepreneurial intentions. The interface with institutions does prove helpful in bringing social entrepreneurship into a more favourable light. The desired moral support and supervision from people's surroundings is considered as an indicator for their endorsement or anticipation that they should become a social entrepreneur. From the structural point of view, support system provides a network whereby the mission of the entrepreneur is entrenched and disseminated. Network ties can work as a rich source of sharing of information and knowledge to create more innovative and significant solutions to the benefit of the wider section of the community. Therefore, helpful in developing the perceived ability and social entrepreneurial intentions.

5.7 The Applicability of the Proposed Model

Overall, the theory of planned behaviour shows a high level of applicability in the study of social entrepreneurial intentions. With an explained variance of 57%, the results are higher than the average scores achieved according to TPB meta-analyses by Armitage and Conner (2001) (overall $R^2 = 39\%$) or Ernst(2011) (overall $R^2=49\%$). The results are also as good as with results derived in studies of entrepreneurial intentions which vary between 35% and 57% (Deborah and Ajzen, 1985; Engle *et al.*, 2010; Gelderen *et al.*,

2008b; M., 2013; McMullen and Shepherd, 2006). For this reason, we can say that the TPB offers a good structure to study intention formation in social entrepreneurship.

Concerning the effects of the critical antecedents on social entrepreneurial intentions, the findings are also in line with previous studies from entrepreneurship: attitude towards becoming a social entrepreneur and perceived behavioural control showed a highly significant positive effect on social entrepreneurial intentions. Perceived behavioural control is the strongest construct of the theory of planned behaviour. This means that the people who are most likely to form social entrepreneurial intentions are those who have a positive sensitivity of becoming a social entrepreneur. But, besides liking the idea of becoming a social entrepreneur is not enough the faith that one could actually go through this process is also important.

Some of the results presented here are in line with prior research. For example, the findings regarding social entrepreneurial self-efficacy and perceived social support are in line with the findings of Forster and Grichnik, (2013) and Hockert's (2015) who conclude that social entrepreneurial intentions are predicted by self-efficacy and perceived collective efficacy. Ernst (2011), on a sample of German university students also found that perceived behavioural control had a positive effect on social entrepreneurial intentions.

Prior findings regarding social norms are somewhat mixed in nature. Forster and Grichnik (2013) find that perceived social norms have a positive effect on corporate volunteering intentions. However, Ernst (2011) found that social norms did not have a statistically significant effect on social entrepreneurial intentions thus reinforcing the findings from this study regarding moral obligation. Given that Forster and Grichnik (2013) were actually studying corporate volunteering this could suggest that whereas

social norms may guide the formation of corporate volunteering intentions the same may not be true for social entrepreneurship intentions as studied in this paper. This might open an interesting avenue for future research.

Findings regarding prosocial personality traits are also contradictory. Forster and Grichnik (2013) find that empathy has a positive effect on corporate volunteering intentions. However, Ernst (2011), actually concluded that empathy had a negative effect on a respondent's attitudes towards starting a social enterprise. In this research empathy, found the strong relationship with all the three moderators' viz. attitude toward becoming a social entrepreneur, subjective norms and perceived behavioural control and social entrepreneurial intentions.

When taking into account prior literature on entrepreneurial intentions these findings seem to be in line with what has been found in that field. A review of entrepreneurship literature by Schlaegel and Koenig (2014) has identified 98 studies on entrepreneurial intentions two-thirds of which have used the TPB. Their meta-analysis finds that perceived behavioural control has the strongest effect on entrepreneurial intentions, with the attitude towards behaviour having a more moderate effect. Both findings are in line with the results from this study. Schlaegel and Koenig (2014) found only a small positive impact of subjective norms on entrepreneurial intentions, which, however, was not statistically significant. This again is in line with the findings in this study (no significant effect was found for moral obligation) suggesting parallels between social entrepreneurial intentions and traditional entrepreneurial intentions.

5.8 Concluding Remarks

In summary, Ernst's (2011) was the first research study in the area of social entrepreneurship that tried to find out the effect of antecedents on social entrepreneurial

intention formation. In her research study, both empathy and moral obligation did not show any relationship with subjective norms. Hockert's (2015) also tried to measure the effect of empathy on multiple samples and found mixed results. On one sample of Hockert's (2015) study, empathy showed significant relationship whereas on another sample empathy showed an insignificant relationship. Hockert's (2015) himself called for further research into the effect empathy has on social entrepreneurial intentions. In our research study, empathy showed a strong relationship with subjective norms and with social entrepreneurial intentions. Social entrepreneurial antecedents have a diverse effect on social entrepreneurial intentions. This is one of the first studies to analyse the indirect link between social entrepreneurial antecedents and social entrepreneurial intentions. With this study, we have contributed to the growing body of empirical literature on social entrepreneurship by synthesising results from the literature on entrepreneurial intentions. This is probably first empirical study of its kind to the knowledge of authors that has been conducted in India in the area of social entrepreneurship and hence its findings can prove to be helpful in this part of the world where social entrepreneurship as a phenomenon is growing at a tremendous speed but research in this field is still struggling to keep the pace.

Chapter 6

QUANTITATIVE VALIDATION: USING NASCENT SOCIAL ENTREPRENEURS

6.1 Introduction

In the previous chapter, the proposed model was tested using the sample of the student population. In this chapter, for addressing the third objective of this research study an attempt has been made to validate the derived model by using a sample of nascent social entrepreneurs.

Nascent entrepreneurs are the people who have indulged in the process of creating a venture. As a venture creation is a multi-step process, Reynolds and White (1997) defined venture creation as four stages (conception, gestation, infancy, and adolescence), with three transitions process. The very first transition process starts when one or more individuals begin to devote time and other resources for the inception of a new venture. If they carry out this on their own and if the new enterprise can be considered as a start-up, they are called nascent entrepreneurs (Wagner, 2006). Therefore, for further validation/modification of the derived model a sample of nascent social entrepreneur has been taken whose intentions are converted into some form of behaviour already.

The model has been validated both quantitatively and qualitatively. For validating the proposed model quantitatively, a sample of 345 nascent social entrepreneurs who are enrolled in universities like IITs, IIMs, TISS-Mumbai, NITs and other colleges and universities have been taken. For validating the model qualitatively a sample of 9 social

entrepreneurs has been taken. The quantitative validation is presented in this chapter. The qualitative validation is presented in next chapter.

6.2 Quantitative Validation: through Nascent Social Entrepreneurs

The empirical research on entrepreneurship has relied primarily on university students on; only a few have used nascent entrepreneurs/social entrepreneurs. Furthermore, there are limitations that are associated with using students as a sample, for example, their limited awareness regarding their own entrepreneurial capabilities, as they don't have the entrepreneurial experience to evaluate if they could become entrepreneurs or not. Even though students who have some prior exposure to entrepreneurship courses normally show signs of some characteristics of nascent entrepreneurial behaviour but we cannot be sure about all the students hence there is an inherent limitation of taking only students' sample. In this vein, McGee *et al.*, (2009) recommended that research studies in the area of entrepreneurial behaviour should also include nascent entrepreneurs along with students in order to identify the role of motivational antecedents of intentions.

Nascent entrepreneurs are individuals who are yet to found a new venture. They have the craving to start a new venture and are involved in certain activities in order to make it occur (Carter *et al.*, 1996). As suggested by Aldrich and Martinez (2001) nascent entrepreneurs are individuals who are not only giving a serious thought to starting a new venture but are also engaged in activities related to starting a venture, for example, developing a business plan, investing money, organising a start-up team, etc.

Reynolds and White (1997) defined venture creation as four stage process (conception, gestation, infancy, and adolescence), with three transitions process. The very first transition process starts when one or more individuals begin to devote time and other resources for the inception of a new venture. According to Wagner (2006), “a

nascent entrepreneur is defined as a person who is now trying to start a new business, who expects to be the owner or part owner of the new firm, who has been active in trying to start the new firm in the past 12 months and whose start-up did not yet have a positive monthly cash flow that covers expenses and the owner-manager salaries for more than three months”.

So for the purpose of our research study we have used the concept of nascent social entrepreneurs given by Germak, (2013) who defined “*nascent social entrepreneurs “as the individuals who are involved in one or more phase of social start-up development e.g. developing an idea, looking for funding or developed their minimum viable product”*”.

A similar trend is followed by researchers in the field of social entrepreneurship by using student samples in order to test the effect of social entrepreneurial intentions. But the present study further validates the student tested intentions model by using a sample of nascent social entrepreneurs. To find out whether nascent social entrepreneurs show any difference in developing intentions as compared to students.

6.3 Research Method and Data Collection

It was estimated that social nascent entrepreneurs constitute a relatively small group in society, therefore for the purpose of this study we targeted social entrepreneurs who were enrolled in the universities of India. Snowball sampling technique was used to collect the data. A total 345 responses were collected and snowball sampling technique has been used. The respondents were aged between 20-40 years. 89% (308) of the respondents are male and 11.03% (37) are female.

6.4 Descriptive Analysis

As shown in above pie chart, out of the total respondents (N=345), 308 respondents (89%) are male and 37 respondents (11%) are female.

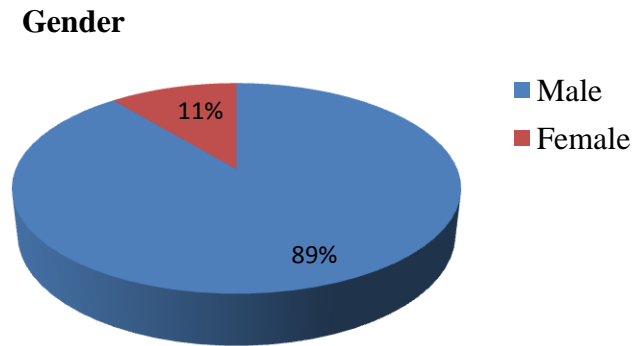


Figure 6.1: Respondents mix based on Gender

As shown in the pie chart, out of total population 128 (37%) respondents belongs to the family who runs or associated with some sort of business activities. 217 (63%) do not belong to a family with a business background.

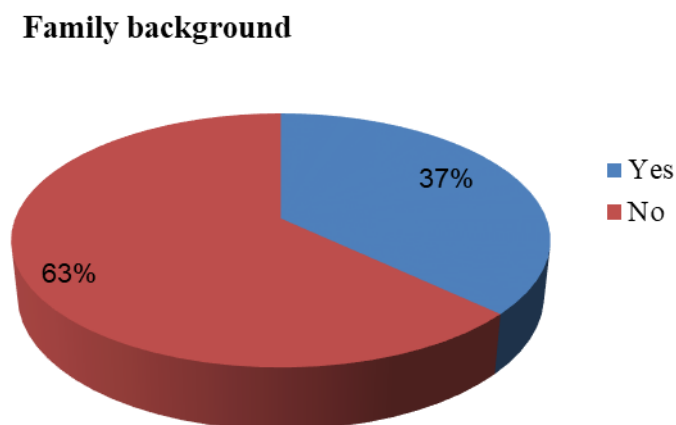


Figure 6.2: Respondents mix based on Family Own Business

6.5 Analysis

For the data analysis, confronted factor analysis has been used followed by structural equation modelling. CFA is performed by AMOS 18 software.

According to the recommendation given by Anderson and Gerbing (1988), a two-stage analytical method to test the model has been used. In the first stage, we fitted measurement model to the data set collected and at the second stage structural equation modelling was used. Structural equation modelling (SEM) was also used for empirical analysis of the derived model. The calculated statistics of measurement model are shown in Table-6.1 In addition to this, all the indicators loaded significantly on the corresponding latent constructs. The values of the fit indices indicate a reasonable fit of the measurement model with the sample data (Fan and Sivo, 2005).

Table 6.1: Calculated Statistics for the Measurement Model

S.No.	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit Measures	RMSEA
	χ^2	χ^2/df	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 1	440.456	1.927	0.021	0.955	0.921	0.953	0.988	0.066	0.055

Table 6.2: Composite Reliability of the Constructs

Construct	Composite reliabilities(ρ_c)
Attitude toward becoming a social entrepreneur	0.881
Subjective Norms	0.723
Perceived Behavioural control	0.899
Innovativeness	0.911
Creativity	0.926
Proactivity	0.887
Locus of control	0.797
Emotional intelligence	0.913
Risk taking propensity	0.901

Construct	Composite reliabilities(ρ_c)
Empathy	0.864
Moral obligation	0.880
Social responsibility	0.811
Entrepreneurial educational background	0.898
Previous experience in societal activities	0.936
Self-efficacy	0.875
Perceived social support	0.815
Social entrepreneurial intentions	0.956

Table 6.2 above indicates the calculated values of composite reliability for the sixteen constructs that were found to be more than 0.6, which is acceptable and indicates the reliability of constructs (Little *et al.*, 2002). Construct validity is established in this study by establishing the content validity, convergent validity and discriminant validity.

Content validity is verified through expert's interaction and literature support in the area of social entrepreneurial intention model. Convergent validity is assessed by examining the AVE (average variance extracted and factor loadings (Fornell and Larcker, 1981). All the indicators have shown significant loadings onto their respective latent constructs with values varying in between 0.65 to 0.94. In addition, AVE for each construct is greater than or equal to 0.50, which further supports the convergent validity of the constructs. Discriminant validity was established by comparing the AVE values with the corresponding inter-construct squared correlation estimates. The comparison revealed AVE values are higher than the square of the inter-construct correlations. Thus, the measurement model reflects good construct validity and desirable psychometric properties.

6.5.1 Structural Equation Modelling

In the second model (Figure 6.3, 6.4 and 6.5), the structural social entrepreneurial model is validated. In short, the structural model confirms the structure of the social entrepreneurial model.

Table 6.3: Summary of Hypothesized Models

Model	χ^2/df	RMSEA	SRMR	GFI	NNFI	CFI	AGFI
Hypothesized Proposed Model	4.53	0.048	0.059	0.91	0.96	0.92	0.92
Alt. Model 1 TPB construct \rightarrow SEI	7.98	0.044	0.059	0.88	0.89	0.89	0.88
Alt. Model 2 Creativity \rightarrow TPB Construct	15.07	0.059	0.065	0.84	0.85	0.92	0.88
Alt. Model 3 Proactivity \rightarrow TPB Construct	11.01	0.062	0.060	0.80	0.79	0.77	0.81
Alt. Model 4 Innovativeness \rightarrow TPB Construct	10.55	0.051	0.062	0.88	0.85	0.84	0.83
Alt. Model 5 Risk Taking Propensity \rightarrowTPB Construct	8.88	0.050	0.059	0.89	0.90	0.89	0.88
Alt. Model 6 Emotional Intelligence \rightarrowTPB Construct	15.45	0.066	0.051	0.83	0.85	0.80	0.85
Alt. Model 7 Internal Locus of Control \rightarrow TPB Construct	7.62	0.049	0.052	0.91	0.89	0.88	0.93
Alt. Model 8 Empathy \rightarrowTPB Construct	9.56	0.050	0.055	0.82	0.84	0.86	0.82
Alt. Model 9 Moral obligation \rightarrowTPB Construct	13.51	0.062	0.061	0.77	0.79	0.80	0.81
Alt. Model 10 Social Responsibility \rightarrow TPB Construct	11.76	0.067	0.065	0.80	0.78	0.81	0.078
Alt. Model 11 Ent/Social Ent Edu \rightarrow TPB Construct	10.89	0.057	0.050	0.84	0.86	0.89	0.86
Alt. Model 12 Previous Exposure \rightarrow TPB Construct	12.23	0.059	0.061	0.88	0.84	0.83	0.81
Alt. Model 13 Self-efficacy \rightarrow TPB Construct	8.51	0.055	0.060	0.91	0.88	0.90	0.88
Alt. Model 14 Perceived social support \rightarrow TPB Construct	9.04	0.051	0.088	0.89	0.92	0.89	0.91

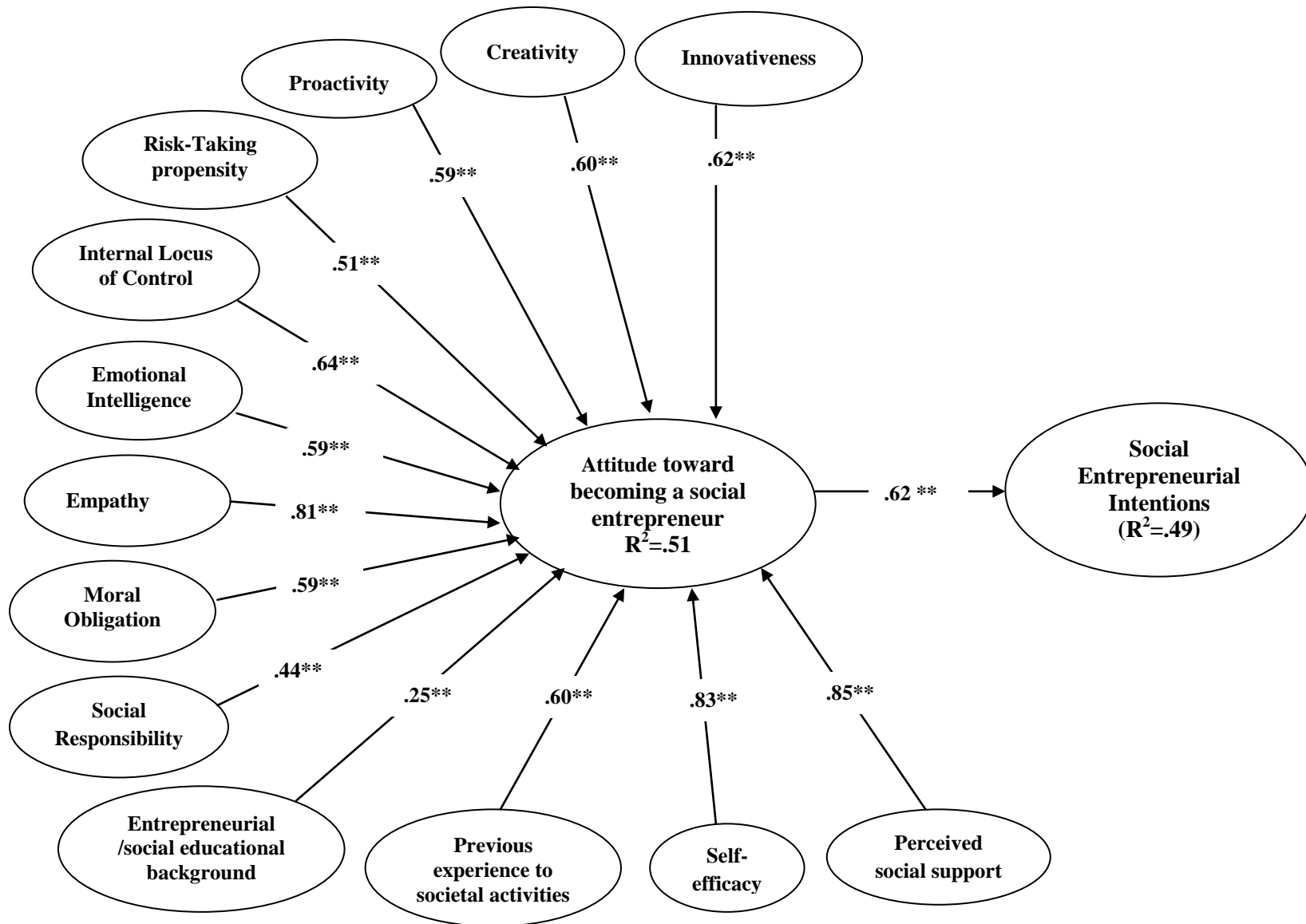


Figure 6.3: Structural Model for the effect of antecedents on attitude toward becoming a social entrepreneur

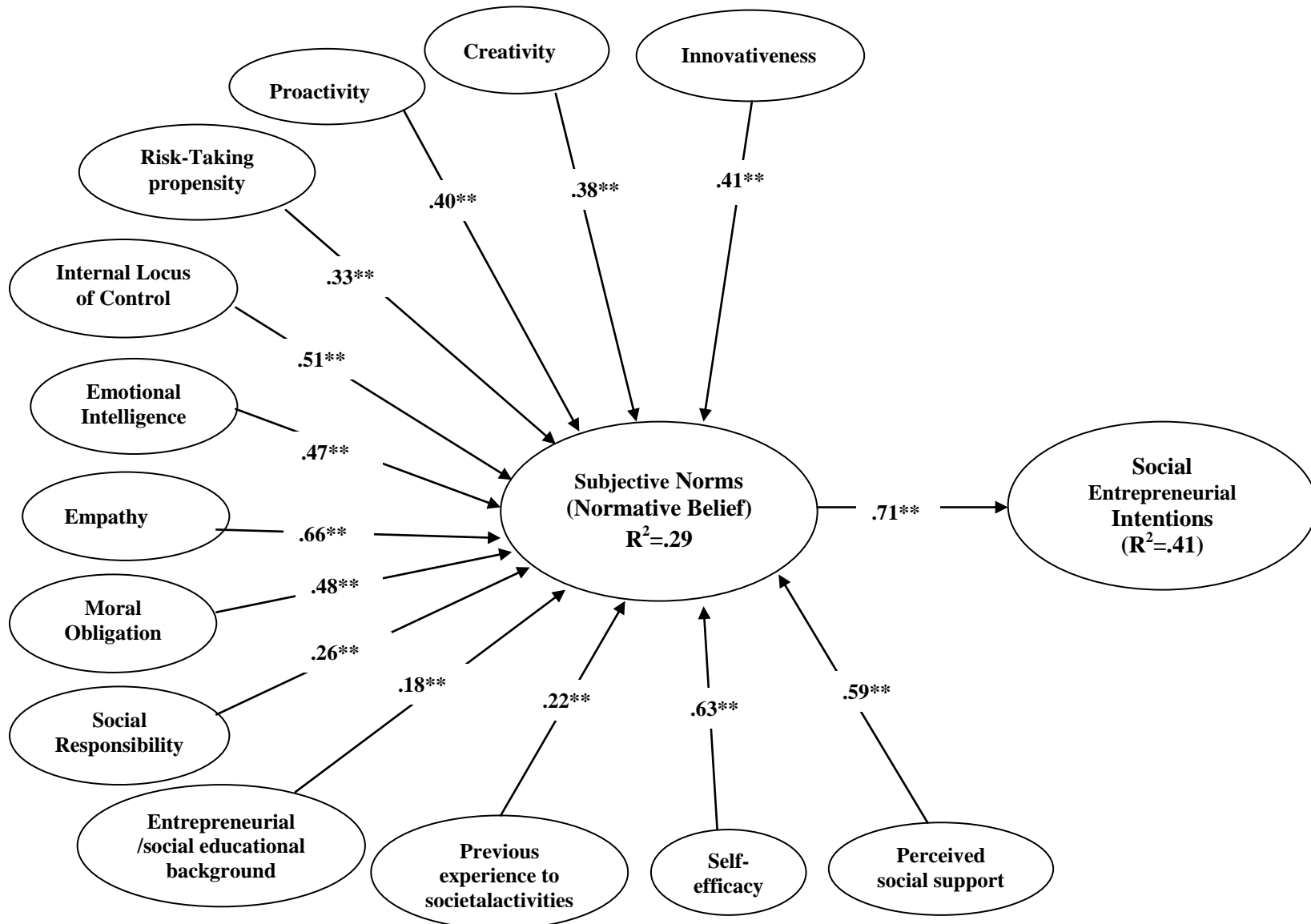


Figure 6.4: Structural Model for the effect of antecedents on subjective norms.(Normative Belief)

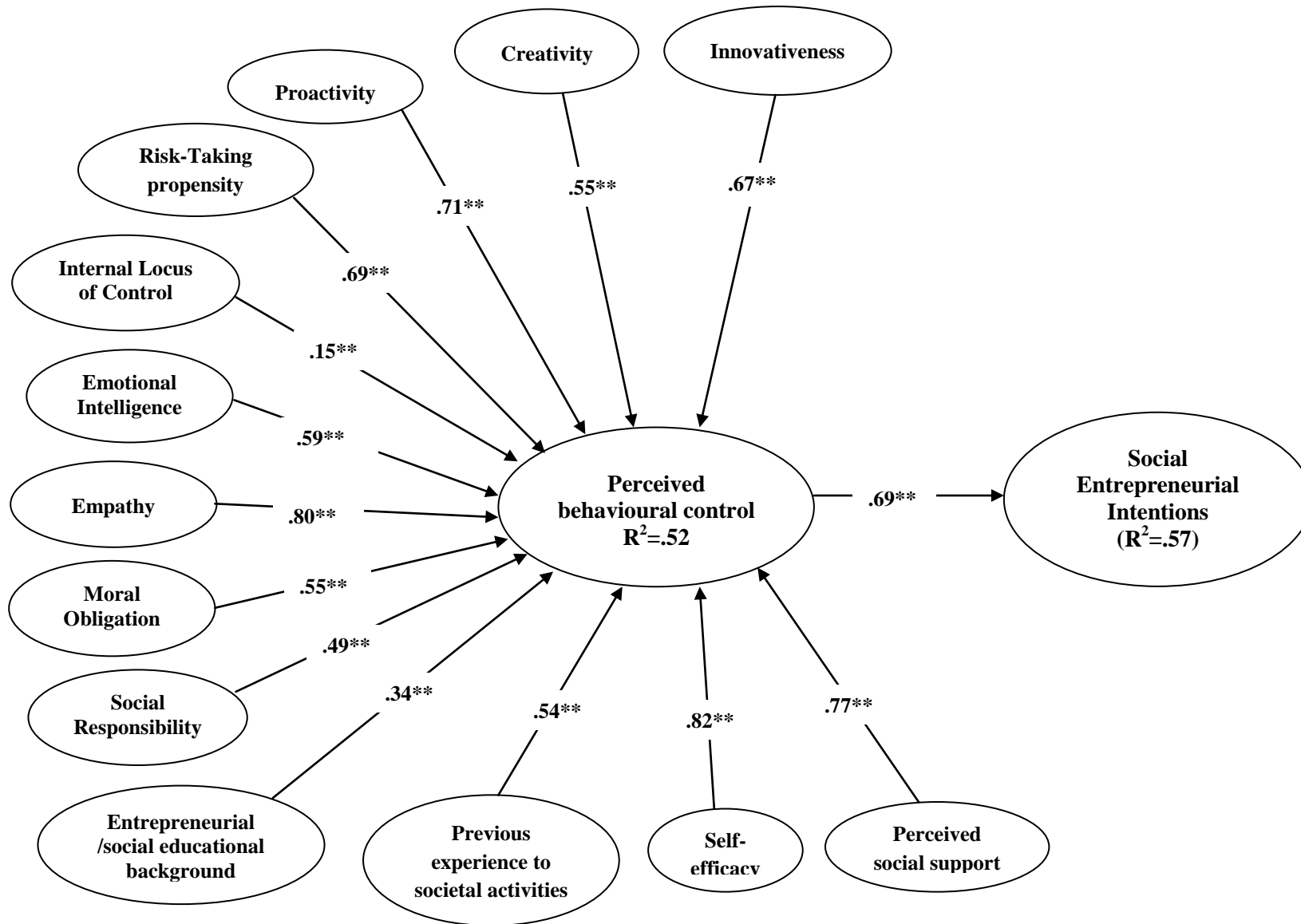


Figure 6.5: Structural Model for the effect of antecedents on perceived behavioural control

6.6 Discussion of Findings

The discussion of the results and the findings are presented in this section.

6.6.1 The Effect of Attitude, subjective norms (normative belief) and perceived behavioural control towards becoming a social entrepreneur and Social Entrepreneurial Intentions

As similar to the previous analyses attitude towards becoming a social entrepreneur showed a strong positive relationship ($\beta=0.62, p<.01$) with the social entrepreneurial intention (as shown in Figure 6.4). This depicts that the higher the attitude towards becoming a social entrepreneur, the higher the social entrepreneurial intention. As suggested by Ajzen (1991) attitude toward a behaviour is one of the most sorted elements of the theory of planned behaviour.

The result of the study shows that subjective norms (normative belief) showed a strong significant relationship with social entrepreneurial intentions ($\beta= 0.71, p<.01$). As compared to the results of previously tested model subjective norms showed a strong relationship with social entrepreneurial intentions.

There is a significant relationship between perceived behavioural control and social entrepreneurial intention ($\beta=.69, p<.01$).

6.6.2 The Effect of Personality Traits on Attitude toward becoming a social entrepreneur, Subjective Norms (Normative belief) and Perceived Behavioural Control.

The critical antecedents of personality traits are creativity, proactivity, innovativeness, internal locus of control, risk-taking propensity and emotional intelligence. The results of the research study showed that personality traits have strong positive relationship toward attitude towards becoming a social entrepreneur. Among personality, traits internal locus of control showed the

strongest relationship with attitude towards becoming a social entrepreneur ($\beta=.64$) followed by innovativeness ($\beta=.62$) followed by creativity ($\beta=.60$) followed by emotional intelligence ($\beta=.59$) followed by proactivity ($\beta=.59$) followed by risk-taking propensity ($\beta=.51$).

The relationship between personality traits and subjective norms improved considerably. All antecedents of personality traits viz. innovativeness($\beta=.41$), creativity ($\beta=.38$), proactivity ($\beta=.40$), risk-taking propensity ($\beta=.33$), internal locus of control ($\beta=.51$) and emotional intelligence ($\beta=.47$) showed a strong positive relationship with subjective norms.

Perceived behavioural control also showed a significant positive relationship with the antecedents of personality traits viz. innovativeness($\beta=.67$), creativity ($\beta=.55$), proactivity ($\beta=.71$), risk-taking propensity ($\beta=.69$), internal locus of control ($\beta=.15$) and emotional intelligence ($\beta=.59$).

6.6.3 Effect of Pro-Social Personality traits on Attitude toward becoming a social entrepreneur, Subjective Norms(Normative belief) and perceived behavioural control

The critical antecedents of prosocial personality traits are empathy, moral obligation and social responsibility. The results of the research study showed that prosocial personality traits have strong positive relationship toward attitude towards becoming a social entrepreneur. Among prosocial personality traits empathy showed the strongest relationship with attitude towards becoming a social entrepreneur ($\beta=.81$) followed by moral obligation ($\beta=.59$) followed by social responsibility ($\beta=.44$).

The relationship between prosocial personality traits and subjective norms improved considerably. All antecedents of personality traits viz. empathy ($\beta=.66$), moral obligation($\beta=.48$), and social responsibility ($\beta=.26$) showed a strong positive relationship with subjective norms.

Perceived behavioural control also showed a significant positive relationship with the antecedents of personality traits viz. empathy ($\beta=.55$), moral obligation ($\beta=.49$), and social responsibility ($\beta=.49$).

6.6.4 The Effect of Social Factors on Attitude toward becoming a social entrepreneur, Subjective Norms(Normative belief) and Perceived Behavioural Control

The critical antecedents of social factors are entrepreneurial/social educational background and previous exposure to societal activities. The results of the research study showed that social factors have strong positive relationship toward attitude towards becoming a social entrepreneur. Among social factors, previous exposure to societal activities showed the strongest relationship with attitude towards becoming a social entrepreneur ($\beta=.60$) followed by entrepreneurial/social educational background ($\beta=.25$).

The relationship between social factors and subjective norms improved considerably. All antecedents of social factors viz. previous exposure to societal activities ($\beta=.22$), and entrepreneurial/social educational background($\beta=.18$) showed a strong positive relationship with subjective norms.

Perceived behavioural control also showed a significant positive relationship with the antecedents of social factors viz. previous exposure to societal activities ($\beta=.54$), and entrepreneurial/social educational background($\beta=.34$).

6.6.5 The Effect of Enablers on Attitude toward becoming a social entrepreneur, Subjective Norms (Normative Belief) and Perceived Behavioural Control

The critical antecedents of enablers are self-efficacy and perceived social support. The results of the research study showed that enablers have strong positive relationship toward attitude towards becoming a social entrepreneur. Among enables, self-efficacy showed the strongest relationship with attitude towards becoming a social entrepreneur ($\beta=.83$) followed by perceived social support ($\beta=.85$).

The relationship between social factors and subjective norms improved considerably. Both antecedents of enablers viz. self-efficacy ($\beta=.63$), and perceived social support ($\beta=.59$) showed a strong positive relationship with subjective norms.

Perceived behavioural control also showed a significant positive relationship with the antecedents of enablers viz. self-efficacy ($\beta=.82$) and perceived social support ($\beta=.77$).

6.7 Concluding Remarks

This work contributes to the study of social entrepreneurial intention using data from nascent social entrepreneurs. In particular, the research question that motivated this study aimed to address whether nascent social entrepreneurs' samples exhibit different patterns compared to students' samples when analysing for social entrepreneurial intention. In this sense, compared to previous studies, an approach through nascent social entrepreneurs provides strong R^2 values for social entrepreneurial intention. ($R^2=0.75$). The results from the structural equation modelling presented in this study suggest that there is a significant positive relationship between being a nascent social entrepreneur's attitude, subjective norms and perceived behavioural control –

social entrepreneurial intentions. As compared to the previous model for undergraduate students, the antecedents showed a strong significant relationship with the three construct of the theory of planned behaviour and social entrepreneurial intentions. When the empirical evidence was filtered through the lens of the theory of planned behaviour, it emerged that emotional intelligence forms an inseparable part of how a nascent social entrepreneur understands his planning activities.

When explaining social entrepreneurial intentions, nascent social entrepreneurs who already owned a business exhibit differences with those who haven't started their social venture. The relationship between antecedents and subjective norms is significantly in the case of on nascent social entrepreneur probably because they have noticed how important societal support is for founding a social venture. However, the perceived behavioural control influenced significantly social entrepreneurial intentions of those who never started a business. This indicates a linkage between prior knowledge and intentionality through perceived behavioural control. The result of nascent social entrepreneurs also showed a strong effect of subjective norms as compared to the sample of undergraduate's student's sample. The results of research studies contribute to the growing literature by exploring the role of critical antecedents on the development of the social entrepreneurial intentions of nascent social entrepreneurs.

Chapter 7

QUALITATIVE VALIDATION: THROUGH EXPERT OPINION OF SOCIAL ENTREPRENEURS

7.1 Introduction

This chapter addresses the fourth objective of the present study to qualitatively validate the derived model. Social entrepreneurs are restless, mission-driven individuals who strive to change the world, their cities, and their communities by implementing sustainable business ventures designed to create social impact.

With this exploratory qualitative study, we seek to further validate our model and try to find out what drives social entrepreneurs to engage in social entrepreneurship (SE). The expert opinion survey was used to collect the responses from experts' i.e. social entrepreneurs. The survey included one paragraph regarding the research objective, one page of social entrepreneurship framework description and one-page containing six questions. The researcher also explained the utility and importance of social entrepreneurial intentions and the framework to the participants. The objective of this survey is to find out the usefulness of the framework by a retrospective reflection by social entrepreneurs. Therefore, we found it useful to get the opinions from a few social entrepreneurs. Initially, 12 participants volunteered for the survey. But after initial screening, some were found to be nascent social entrepreneurs and only 9 social entrepreneurs participated in this opinion poll.

7.2 Validation Survey Results

Nine social entrepreneurs answered the validation survey questionnaire and made comments. Some comments were short and a few were very comprehensive. The answers were treated anonymously. One respondent said that “the model is very exhaustive and comprises all the factors that motivate social entrepreneurs”, while another respondent said that “such type of framework is very important for the Indian universities and for the government that tried to make policies regarding the development of entrepreneurship”. A third social entrepreneur said that “social entrepreneurship as an area is not at all recognised. Such type of empirical model is very helpful for social entrepreneurship in attaining the desired position”.

Table 7.1 presents the validity survey results. Table 7.1 shows that all respondents rated the model as very good on relevance, usefulness and practicability, and assumed a score of more than 6 and even good at completeness (6.56). The Framework is low in complexity, and the average score is less than 2.

**Table 7.1: Descriptive Statistics for Social Entrepreneurial Intentions Model
Validation Survey**

Parameter	N	Minimum	Maximum	Mean	Standard Deviation
Practicability	9	5	7	6.41	0.98
Completeness	9	5	7	6.56	0.86
Relevance	9	6	7	5.98	0.54
Usefulness	9	6	7	6.37	1.01
Complexity	9	2	4	2.83	0.88

The respondents' answers to some important questions are given below:

Q.1 Do you aware of any model that measures the social entrepreneurial intention process?

None of the respondents ever participated in such type of survey related to the development of the social entrepreneurship intention model. Two respondents said that “this model provide clarity regarding how societal pressure work and how it provides a push to the social entrepreneurial activities”.

Q.2 Is there anything in the Social Entrepreneurial Intention Model, which is unclear and needs more clarification?

One of the respondents said that it was self-explanatory and every antecedent used in the study very well explained its importance in the model. Out of ten six respondents agreed with the completeness of the model. Two said they didn't know have knowledge that such type of a model could be conceptualised much less tested. This model was presented to be very comprehensive.

Q.3 Is there anything which is obvious and could be deleted?

Six respondents said, “No, it is an exhaustive model and quite a novel way to explain the factors that motivate students to opt for social entrepreneurship as a career option”. None of the respondents had anything new to add here.

Q.4 Do you think such model is relevant for the development of social entrepreneurship in India?

Eight respondents emphasised the fact that such model is the today's demand for the promoting social entrepreneurship at University and at the school level. One respondent said that this model has undergone three stage of development. First from the inputs from

students, second from nascent social entrepreneurs and third from actual social entrepreneurs, therefore the credibility of the model is greater.

Q.5 Is the terminology used in the social entrepreneurial intention model comparable to the terminology that you yourself use? If not please point out the deviations?

The Respondents reported that they are familiar with the terminology used in the model. All said that all the factors derived from measured variables were understandable and used by practitioners in their business language.

Q.6 What do you think about the practicability of the model?

Seven respondents agreed that social entrepreneurial intention model provides insights regarding the factors that should be given importance to motivate youth toward social entrepreneurship?

It seemed that the respondents, in spite of some reservation regarding complexity and a larger amount of information needed by model, agreed that the model was easy to understand and helpful in order to promote policies that can develop social entrepreneurship culture in India. The respondents agreed that the model could be useful by the government, by universities or any other supporting body that is involved in promoting social entrepreneurship.

Moreover, all variables seem to be open to manipulation. Concretely, interested academic institutes should engage in and try to measure the effect of service learning that exposes students to social problems first hand

One of the respondents, a social entrepreneur commented,

“That’s really what it’s all about. . . serving the people whether you use a regular idea or something that’s already been done or you use an innovative idea to change it. Either way, you’re yet serving the people.

You’re speeding along and you’re driving along the lines of the boundaries of this here city. There’s so much more than you could be a part of. . . so much more than you can do. But we do not have infrastructure and support management. Such type of research study paves a path for the collaboration between research and the real world. That jointly motivates young minds toward social innovation”.

Chapter 8

CONCLUSION AND FUTURE SCOPE OF RESEARCH

8.1 Introduction

A summary of this study has been presented in this chapter. Significant contributions have been highlighted and the important implications of the study have been discussed. In this study, a questionnaire survey and Structural equation modelling (SEM) have been applied to address the objectives of the study for empirically testing the proposed model. The limitations of the present study have also been stated. Directions for future research have also been suggested.

8.2 Consolidation of the Study

The study has attempted to develop a model explaining the process depicting antecedents to the formation of social entrepreneurial intentions in an individual. This study has attempted to offer a theory-driven approach to social entrepreneurship research by taking the theory of planned behaviour as basic research framework & adding the further antecedents to the constructs of the theory of planned behaviour, derived from an extensive literature review and also referring the prosocial studies & human capital theory. A unique aspect of this research study is that besides taking a sample of students for empirically testing the proposed model, this research study has also taken a sample from the population of nascent social entrepreneurs and social entrepreneurs for the quantitative and qualitative validation of the results.

This study further adds to the growing literature of the social entrepreneurship by confirming the applicability of the theory of planned behaviour in the field of social

entrepreneurial intentions. This study also successfully applied and adapted the theory of planned behaviour for explaining the social entrepreneurial intentions formation.

A review of the literature in entrepreneurship, intention and social entrepreneurship was carried out to determine a methodological framework for the collection of field data. The objective of this study was to assess the effect of critical antecedents on social entrepreneurial intentions. In order to accomplish this research objective structural equation modelling (SEM) was applied. Many research studies (Hockerts 2015; Rueda *et al.*, 2015; Zampetakis *et al.*, 2009) used SEM for generating an intention based model. This methodology was used for better credibility and reliability of the results and for better comparisons of the results. A structured questionnaire was used for the data collection from 2 sets of populations as undergraduates and nascent social entrepreneurs. The sample of undergraduate students (1432 respondents) was first used for empirically testing the model and later the sample of nascent entrepreneurs (345 respondents) was used for validating the model. Later, the model was also tested qualitatively by taking the opinion of 9 social entrepreneurs.

8.3 Major Findings of the Study

According to the Krueger (1993), antecedents do not directly affect intention but they affect attitude and which later influence intentions. Therefore in this research study, the theory of planned behaviour as the research framework has been used. The study has come with the following major findings:

- The results of the theory of planned behaviour are found to be in line with similar studies from entrepreneurship. “Attitude toward becoming a social entrepreneur” and “Perceived behavioural control” show high significant positive effects on social entrepreneurial intentions. This highlights that the students who are

expected to develop a social entrepreneurial intention are those who have a positive perception toward becoming a social entrepreneur. But, fondness for the idea of becoming a social entrepreneur is not adequate, the conviction that one could actually go through with it is also important.

- The result of the study also suggests that subjective norms (normative belief) also affect the social entrepreneurial intentions. Findings regarding the result of subjective norms (normative belief) are contradictory to the previous study of Ernst (2011) where subjective norms did not show any significant relationship with the social entrepreneurship intention. Therefore, the role of subjective norms should be explored further in the collectivist country like India where there exist strong family ties. Exerted pressure from the important people and close surroundings do affect the decision-making process. Moreover, findings related to the theory of planned behaviour in the past research found that injunctive norms (what should be done) might be less powerful predictors of behaviour than descriptive norms, which involve the perceptions of which behaviours are actually performed within an individual's peer groups. Researchers also believe that there might be considerable differences between perceived injunctive and descriptive norms in a peer group and the actual norms espoused.

Hence for the future research subjective norms should be taken as the central factor that not only affects intention process but also controls other factors interaction.

- The relationship between antecedents taken (social entrepreneurial personality, prosocial personality traits, social factors and enablers) and the constructs of the theory of planned behaviour (attitude, subjective norm and perceived behavioural control) are found to be of relevance for the formation of social entrepreneurial intentions.

- For undergraduate students, self-efficacy, empathy and perceived social support are found to have the strongest impact on all antecedents in forming their attitude towards becoming a social entrepreneur. Whereas, proactivity, empathy and self-efficacy found to be the most critical antecedents impacting perceived subjective norms (normative belief). Similarly, self-efficacy, perceived social support and proactivity are found to be the most critical antecedents impacting perceived behavioural control. If looked in all, self-efficacy, perceived social support, proactivity and empathy are found to be the most critical antecedents influencing the immediate predictors (attitude, subjective norms and perceived behavioural control) of social entrepreneurial intentions.
- In the sample of nascent entrepreneurs, perceived social support, self-efficacy and empathy are found to have the strongest impact on all antecedents in forming their attitude towards becoming a social entrepreneur. Similarly, self-efficacy, empathy and perceived social support are found to be the most critical antecedents impacting perceived subjective norms (normative belief). Similarly, empathy, self-efficacy, perceived social support and proactivity are found to be the most critical antecedents impacting perceived behavioural control. If looked in all, self-efficacy, perceived social support, and empathy is found to be the most critical antecedents influencing the immediate predictors (attitude, subjective norms and perceived behavioural control) of social entrepreneurial intentions.

The above findings of the study have to lead to important implications as discussed in next sections.

8.4 Implications for the Government Policy Makers

The findings of the study have provided very important and useful implications for the government policymakers. Also, the research implications for academic universities/institutes and from the researcher's point of view have also been presented separately in the subsequent sections. The important and useful implications for the government policymakers are as:

- As self-efficacy, perceived social support and empathy are found to be the most critical antecedents, the government policymakers may come up with various skill development programmes for the individuals where they can be trained and challenged to take up entrepreneurial activities & sensitized to empathize towards social problems, providing with minimum resource support to come up with the solutions addressing social problems.
- The positive relationship of entrepreneurship education is insightful for policymakers at the Ministry of HRD to establish the formal social entrepreneurial courses in all secondary and tertiary learning institutions, providing a better social or entrepreneurial environment and facilitating new venture creation in India. It's important to pay attention to trends, students who become social entrepreneurs begin in their teens. Students have to appreciate their role as future leaders within an ecosystem comprising businesses, society and the environment. Internalisation of the interconnectedness of economic, social and environmental concerns requires continual reflective learning reinforcements across different disciplines of academia to promote holistic grasps of the principles of sustainability.
- Without any doubt, students who are pursuing different professional courses related to engineering, management, architecture etc., have got motivated through

government schemes like MUDRA and Stand-Up India targeted at Start-Ups. However, there are certain roadblocks which are creating obstacles in fostering entrepreneurial environment and culture in the country. First, there needs to be an awareness of and concern about the social problems and issues to be addressed and committed entrepreneurs interested in addressing them. A policy and regulatory framework within which social entrepreneurs can obtain status without compromising their objectives are also very important.

- Within this context, collaborative efforts between academic institutions, corporations and society are required to provide input towards a more comprehensive education system that addresses the relevant modus operandi for sustainable development. Once they have the knowledge about social entrepreneurship, this will encourage them to be self-employed. In order to facilitate new social venture creation for the younger generation, the government should provide the funds and supporting infrastructures, as well as remove the impediments in the social entrepreneurial career path. If policies don't change, social entrepreneurs can't thrive.

8.5 Implications for Academic Universities/Institutes

The study has come up with the implications for academic universities/institutes as:

- In line with similar findings as mentioned in the previous section, the academic universities/institutes must also include skill development programmes or specific experiential learning based courses on social entrepreneurship as part of their curriculum so that students may try their hand while studying only minimising the risk at later stages of their life.
- The universities should involve at an early stage to provide social entrepreneurship education on to increase awareness of students about social

entrepreneurship, shaping their attitude toward becoming a social entrepreneur and enhancing their perceived behavioural control and personality traits. The findings are insightful for universities program instructor in designing and enhancing the social entrepreneurship course structure, subjects offering as to be proactive enough and practical-oriented with the aim of sustaining student's interest in social entrepreneurship.

- Universities should organise more social entrepreneurial-related activities or programmes and workshops that can enhance student's perceived behavioural control, for instance, projects like a social b-plan proposal, managing the small business on campus or during flea markets, providing opportunities for students to involve in managing their own social start-ups and get prior business experience.

8.6 Research Implications from the Researcher's Point of View

From this study, some research implications have also emerged from the researcher's point of view, which are as follows:

- This study provides the extended model to the scholars for investigating the formation of entrepreneurial intentions among undergraduates in the higher learning institution. The proposed theoretical framework may be referred by other researchers in future studies. Eventually, it would be interesting to use the measures developed here to test in longitudinal studies whether social entrepreneurial education does indeed impact the measures.
- The role of the subjective norm has been challenged by many researchers, stating the importance in predicting entrepreneurial intention. There are some who found that subjective norm is insignificant in predicting entrepreneurial intention (Reitan, 1997; Krueger *et al.*, 2000; Autio *et al.*, 2001; Liñán, 2004; Liñán and

Chen, 2009), some who found that subjective norm is significant (Kolvereid, 1996a; Kolvereid and Tkachev, 1999; Kolvereid and Isaksen, 2006 and some who completely neglect this variable in measuring entrepreneurial intention (Peterman and Kennedy, 2003; Urbano, 2005). Further, the effect of subjective norms on attitude toward becoming a social entrepreneur and perceived behavioural control can be explored and tested.

8.7 Novelty of the Research

The novelty/uniqueness of this research is on the basis of following aspects:

- This research study is novel in the way that the antecedents and social entrepreneurial intention are assessed on two different samples. The first sample is the representation of the undergraduate students (N=1432) who are at the stage of making a career choice and the second sample comprised of people who had already made their choice of becoming a social entrepreneur (N=345). The intentions of the second set of individuals are converted into actual behaviour.
- To date, there are few studies that examined factors related to social entrepreneurship intentions formation. To our knowledge, the present study is the first to examine the relationships between personality traits, prosocial personality traits, social factors and enablers and social entrepreneurial intentions.
- This research tried to empirically test the relationships between antecedents and social entrepreneurial intentions. The present study is unique in the field of social entrepreneurship that not only used a sample of nascent social entrepreneurs but also social entrepreneurs to validate the results of the study.

8.8 Major Contributions of the Research

The major contributions of the research are:

- A good comprehensive literature survey on the subject of social entrepreneurship and social entrepreneurship intentions studies have been done.
- The study has contributed to the pool of research studies on social entrepreneurship. As per recently published article of Mark Hand (2016) in Stanford Social Innovation Review analysed 1,900 journal articles, conference proceedings, and books related to social entrepreneurship and found out major research gap in the existing literature in the field of social entrepreneurship. In this paper through document co-citation network identified 25 most co-cited, and most influential research papers in the field of social entrepreneurship. Out of total twenty-five articles fourteen articles published after 2005. This signifies that literature in the field of social entrepreneurship is very young and still at the developing stage. Besides this more than half of the research papers in the field of social entrepreneurship are still dealing with defining social entrepreneurship either in line with or in contrast to, traditional business or traditional nonprofit work.
- A comprehensive model explaining the formation of social entrepreneurial intentions has been developed and empirically tested.

8.9 Limitations and Future Scope of Research

The aim of this study has been to increase insights on social entrepreneurial intention formation and, hopefully, it has come a long way in doing so. Nonetheless, there are limitations which must be mentioned and issues still open for future research. These relate to the model, the research method, and the practical implications of the study. A few limitations are as follows:

- This study is conducted only in India. A core next step would be to take the validated model and run an international comparative study. Yet, to further underpin insights on the level of the general public and gain more insights into specific effects, follow-up studies should be conducted with larger, more versatile samples. The data used was cross-sectional data, i.e., data from social entrepreneurs who were in different stages of social entrepreneurship. This could be further verified with a longitudinal study of experience. The motivation attribute is another concern that calls for further research. The belief that social entrepreneurs were motivated by the idea of changing world did not find enough evidence in this study, and this must be further clarified in order to develop a “needs theory” of social entrepreneurs.
- The model also offers room for specification and extension. On the one hand, now that the broad frame has been established, deep dives on individual constructs or construct bundles of the model, e.g., the important factors of perceived social entrepreneurial knowledge/experience, should be conducted to further understand the underlying dynamics. Current ambiguities could also be analysed within focused studies. Here, detailed studies could help explain the effects. On the other hand, rather than further elaborate on existing parts of the model, the model should be extended.
- The antecedents studied here with the question of how they interact with deep beliefs or mental prototypes of social entrepreneurship (such as for example suggested by Krueger *et al.*, 2006). In other words, how does the mental stereotype of what it means to be a social entrepreneur moderate the effects observed in this thesis? Such a path of inquiry would allow us to move beyond the black and white world of traditional entrepreneurs and social entrepreneurs.

This, in turn, would allow us to study different manifestations of social entrepreneurs such as the ‘Ashoka’ social innovator (Drayton, 2002), the ‘Yunus’ social business founder (Yunus *et al.*, 2010), or the ‘EMES’ social enterprise leader (Defourny and Nyssens, 2010). As the social entrepreneurship field matures, it will be increasingly important that future research efforts provide a more fine-grained understanding of the different subtypes of social entrepreneurship and their respective antecedents.

- Finally, while the study uses its findings to make initial suggestions for social entrepreneurial education, it cannot make the claim of establishing a full education program or course structure. However, this is of great importance and should be pursued in the future. This study could test the suggestions made above for their applicability.

8.10 Concluding Remarks

The study has led to understanding the process of formation of social entrepreneurial intentions of individuals and the various antecedents to that. The study has provided the model based on theoretical frameworks of the theory of planned behaviour for predicting the social entrepreneurial intentions which are the immediate predictor of the social entrepreneurial behaviour of individuals.

These findings suggest that while the contemporary practices of social enterprises have many similarities with their for-profit counterparts, significant differences can be found when comparing these with extant entrepreneurship research. While the Stage One analysis suggested personality traits are similar but what differentiate are the prosocial personality traits. Finally, both for-profit and social entrepreneurship requires creativity

and innovation, however, in the social context; this is manifested mainly in managerial actions by applying novel solutions to intractable social problems.

The concept of social entrepreneurship has established successfully in the developed market-based economies and is garnering a growing interest in developing country contexts. Due to their positive social and environmental impact on the society including the bottom of the pyramid, social enterprises are crucial to the developing countries which are seeking solutions aiming sustainable and inclusive growth. India too is witnessing a gradual development of the ecosystem with growing market opportunities for social enterprises in the country; however, these are still not well placed in comparison to mainstream enterprises and face several challenges to harness their potential.

Appendix - A

QUESTIONNAIRE

Dear student,

Thank you for taking part in this survey. The following questionnaire looks at your personal intention towards becoming a social entrepreneur. In a first step, please read the following text, which explains the terms, “social entrepreneur” and “business entrepreneur”. Afterwards, please complete the questionnaire. Please remember: there are no wrong or right answers. Please fill out the survey honestly, as this is the only way we can learn from you. Completing the questionnaire will take about 10 minutes. If you have any questions, please ask me. Questions will be kept confidential and result of this study will be used for academic purpose. Thank you for your support.

A **social entrepreneur** runs a company (the social enterprise), which has a social mission as well as its monetary goals – and this social mission is the more important of the two. This means that the primary goal is to address certain social problems, e.g., poverty or homelessness. When asked about becoming a **social entrepreneur**, please consider becoming a social entrepreneur for a **social cause that interests you personally**. When asked about becoming a **business entrepreneur**, please consider becoming an entrepreneur for a **product that interests you personally**.

Name			
Age			
Degree			
When do you expect to finish your studies?	This year (2014)	Next year (2015)	After (2015)
Sex	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
Does your family own a business?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

1. Do you personally know any social entrepreneur or any other business entrepreneurs?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
--	------------------------------	-----------------------------

2. If yes, indicate your relationship to them:

- Family
- Friends
- Others

On the basis of your above mentioned responses please evaluate the following questions on a scale of 1 to 7 where 1 represents extremely well and 7 represents not at all.

	1	2	3	4	5	6	7
You know all about his/her activity as social entrepreneur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You consider him/her as 'good social entrepreneur'.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Does your university/institute offer any course/program on Entrepreneurship	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does your university/institute offer any course/program on Social Entrepreneurship	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have you ever studied entrepreneurship course?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have you ever studied social entrepreneurship course?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Based on your opinion, please indicate the most appropriate response on a scale of 1 to 7 where scale 1 represents strongly disagree and 7 represents strongly agree.

	1	2	3	4	5	6	7
Entrepreneurship should be taught in University.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
More entrepreneurial and business educational programmes on campus would help students to start their venture.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My university provides full opportunity to opt for entrepreneurial career.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entrepreneurship course should be made compulsory in order to stimulate entrepreneurial spirit in campus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Indicate your level of awareness about business associations, support bodies and other sources of assistance for social entrepreneurs on a scale of 1 to 7 where scale 1 represents completely unaware and 7 represents full awareness.

	1	2	3	4	5	6	7
Private associations (Ashoka, Dasra social impact programme, TEDx etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specific training programmes or courses for young social entrepreneurs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Micro finance institute for promoting social entrepreneurship?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical aid for social enterprise start-ups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Indicate your level of agreement with the following statements on a scale of 1 to 7 where scale 1 represents strongly disagree and 7 represents strongly agree.

	1	2	3	4	5	6	7
I can always manage to resolve difficult situations if I try hard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is easy for me to stick to my aims and achieve my goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can solve most problems if I invest the necessary efforts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would describe myself as a good negotiator.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can remain calm when facing difficulties because I can rely on my abilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can usually handle whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I see something I do not like, I change it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am good at predicting how someone will feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel morally compelled to act when I learn about societal problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can think of at least one occasion over the past three months in which I felt a strong obligation on me to solve a societal problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I see homeless person I think of how sad and alone they must feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel compassion for socially marginalized people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Just by looking at somebody, I can understand what he or she feels.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In your closer environment (i.e. family, friends and fellow students), the social entrepreneurial activity is valued better than other activities and careers. Indicate your level of agreement with the following on a scale of 1 to 7 where scale 1 represents strongly disagree and 7 represents strongly agree.

	1	2	3	4	5	6	7
Your close family (parents, siblings and relatives)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your friends (best friends)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My close personal environment would support me financially, if I become a social entrepreneur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

You expect to receive total support from your close environment (i.e. family, friends and fellow students) if you become a social entrepreneur (regarding advice/counselling or networking efforts). Indicate your level of agreement with above statement on a scale of 1 to 7 where scale 1 represents strongly disagree and 7 represents strongly agree.

	1	2	3	4	5	6	7
Your close family (parents, siblings and relatives)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your friends (best friends)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your fellow students and mates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you think you have a satisfactory level of the following capacities to become social entrepreneur? Indicate on a scale of 1 to 7 where 1 represents very low capacity and 7 represents very high capacity.

	1	2	3	4	5	6	7
Opportunity recognition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Creativity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Development of new products and services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Networking and making professional contacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Implementation of ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent do you agree with the following statements regarding your social entrepreneurial capacity? Indicate your level of agreement with the following sentences on a scale of 1 to 7 where scale 1 represents strongly disagree and 7 represents strongly agree.

	1	2	3	4	5	6	7
My parents are positively oriented towards a career as social entrepreneur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My friends see social entrepreneurship as a logical choice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My friends value social entrepreneurial activity above other activities and careers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
You care about how your friends and family members react when you opt for social entrepreneur as a career.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a well-functioning support infrastructure in my University to support the start-up of new firms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Starting a social enterprise and keeping it workable would be easy for me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is entirely up to me whether or not I become	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a social entrepreneur							
I will be able to control the creation process of social enterprise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are very few circumstances outside my control that may prevent me from becoming an social entrepreneur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I know all about the practical details needed to start a social enterprise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Becoming social entrepreneur implies more advantages than disadvantages for me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Becoming social entrepreneur would give me a great satisfaction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A career as social entrepreneur is totally attractive to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amongst various carer options, I would choose to become Social Entrepreneur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I had the opportunity and resources, I'd like to start a firm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Becoming social entrepreneur implies more advantages than disadvantages for me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Becoming social entrepreneur would give me a great satisfaction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A career as social entrepreneur is totally attractive to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amongst various carer options, I would choose to become Social Entrepreneur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I had the opportunity and resources, I'd like to start a firm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Indicate your level of agreement with the following statements on a scale of 1 to 7 where scale 1 represents strongly disagree and 7 represents strongly agree.

	1	2	3	4	5	6	7
I'm usually able to influence the way other people feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I usually find it difficult to regulate my emotions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The earnings I make are the result of my own efforts; luck has little or nothing to do with it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A great deal that happens to me is probably a matter of chance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don't like to put something at risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would rather be on the safe side	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Even when I know that my chances are limited I try my luck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am quite cautious when I make plans and when I act on them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am able to create better social value compared to normal entrepreneur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am an inventive person who has ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get excited by creating my own work opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I see something I don't like, I fix it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I believe in an idea, no obstacle will prevent me from making it happen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I love being a champion for my ideas, even against others' opposition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No matter what the odds, if I believe in something I will make it happen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am always looking for better ways to do things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I excel at identifying opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to support people who have no lobby or social support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I exhibit creativity on my assignments when given the opportunity to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would like to show solidarity for groups in need	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want to create social change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have some experience working with social problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have volunteered or otherwise worked with social organizations like NSS, Nirman etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I know a lot about social organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

It is possible to attract investors for an organization that wants to solve social problems. ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
People would support me if I wanted to start an organization to help socially marginalized people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I planned to address a significant societal problem people would back me up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I do not expect that I would receive much support if I were to start a social enterprise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Indicate your level of agreement with the following statements on a scale of 1 to 7 where scale 1 represents strongly disagree and 7 represents strongly agree.

	1	2	3	4	5	6	7
I am ready to do anything to become social entrepreneur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My professional goal is becoming social entrepreneur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I will make every effort to start and run my own enterprise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am determined to create a social enterprise in the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am going to start my own business within five years of graduation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I prefer to be social entrepreneur rather than to be an employee in a company.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you have any comments, ideas or suggestions, please let me know:

REFERENCES

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [Http://doi.org/10.1016/0749-5978\(91\)90020-T](http://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (1996). The social psychology of decision making. In *Social psychology: A handbook of basic principles* (In E.T. Hi, pp. 297–325). New York: Guilford Press.
- Ajzen, I., & Fishbein, M. (1970). The prediction of behaviour from attitudinal and normative variables. *Journal of Experimental Social Psychology*, 6(4), 466–487. [Http://doi.org/10.1016/0022-1031\(70\)90057-0](http://doi.org/10.1016/0022-1031(70)90057-0)
- Ajzen, I., & Thomas, M. J. (1986). Prediction of Goal-Directed Behavior: Attitudes, Intentions, and Perceived Behavioral Control. *Journal of experimental social psychology*, 22(5), 453–474. [Http://doi.org/10.1016/0022-1031\(86\)90045-4](http://doi.org/10.1016/0022-1031(86)90045-4)
- Appolloni, A., and S. Gaddam. 2009. “Identifying the Effect of Psychological Variables on Entrepreneurial Intentions.”
- Armitage, C. J., & Conner, M. (2001). Efficacy of the Theory of Planned Behaviour: a meta-analytic review. *The British Journal of Social Psychology*, 40(4), 471–499. [Http://doi.org/10.1348/014466601164939](http://doi.org/10.1348/014466601164939)
- Anderson, J. C., and D. W. Gerbing. 1988. “Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach.” *Psychological Bulletin* 103 (3): 411.
- Austin, J., & Reficco, E. (2009). *Corporate Social Entrepreneurship* (9-101). *Human Resource Management* (Vol. 45). Retrieved from <http://www.nowpublishers.com/product.aspx?Product=ENT&doi=0300000015>
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). Social and Commercial Entrepreneurship: Same, Different, or Both? *Entrepreneurship theory And practice*, 30(1), 1–22.
- Bandura, A. (1971). Social learning theory. In *Social Learning Theory* (pp. 1–46).

- General Learning Press. [Http://doi.org/10.1111/j.1460-2466.1978.tb01621.x](http://doi.org/10.1111/j.1460-2466.1978.tb01621.x)
- Bandura, A. (1990). Perceived self-efficacy in the exercise of control over AIDS infection. *Evaluation and Program Planning*, 13(1), 9–17. [Http://doi.org/10.1016/0149-7189\(90\)90004-G](http://doi.org/10.1016/0149-7189(90)90004-G)
- Bandura, A. (1999). Social cognitive theory of personality. *Handbook of Personality*, 154–196. Retrieved from <http://search.epnet.com/login.aspx?Direct=true&db=psych&an=1999-04371-006&loginpage=login.asp&site=ehost>
- Barendsen, L., and H. Gardner. 2004. “Is the Social Entrepreneur a New Type of Leader?” *Leader to Leader* 2004 (34): 43.
- Bikse, V., B. Rivza, and I. Riemere. 2015. “The Social Entrepreneur as a Promoter of Social Advancement.” *Procedia-Social and Behavioral Sciences* 185: 469–478.
- Binder, J., and F. Belz. 2015. “Implementing Entrepreneurial Ideas: The Case for Intention.” *Academy of Management Review* 13 (3): 442–53.
- Boren, Amy E. 2010. “Emotional Intelligence: The Secret of Successful Entrepreneurship.” *Leadership in Agriculture* 2: 54–61.
- Boyd, Nancy G., and George S Vozikis. 1994. “The Influence of Self-Efficacy on the Development of Entrepreneurial Intentions and Actions.” *Entrepreneurship Theory & Practice* 18: 63–63.
- Bandura, A. (1997). Guide for constructing self-efficacy scales. *Self-efficacy beliefs of adolescents*, 5(307-337).
- Bentler, P. M., & Bonett, D. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588–606. [Http://doi.org/10.1037/0033-2909.88.3.588](http://doi.org/10.1037/0033-2909.88.3.588)
- Bird, B. (1988). Implementing Entrepreneurial Ideas : The Case for Intention. *The Academy of Management Review*, 13(3), 442–453.
- Bird, E., & Truls, M. Y. (2004). A study of entrepreneurial intentions among a cohort

- MBA's- the extended bird model y truls Erikson, (June 1998), 1–12.
- Boren, A. E. (2010). Emotional Intelligence : The secret of successful entrepreneurship ? *Leadership in Agriculture*, 2, 54–61.
- Bornstein, D., & Davis, S. (2010). *Social entrepreneurship what everyone needs to know*. Oxford University Press, Oxford.
- Boschee, J. (1995). Social Entrepreneurship: Some nonprofits are not only thinking about the unthinkable, they're doing it – running a profit. *Across the Board, The Conference Board Meeting*, 32(3), 1–25.
- Boyd, N. G., & Vozikis, G. S. (1994). The Influence of Self-Efficacy on the Development of Entrepreneurial Intentions and Actions. *Entrepreneurship Theory & Practice*, 18, 63–63.
- Bryant, P. (2009). Self-regulation and moral awareness among entrepreneurs. *Journal of Business Venturing*, 24(5), 505–518. [Http://doi.org/10.1016/j.jbusvent.2008.04.005](http://doi.org/10.1016/j.jbusvent.2008.04.005)
- Bull, M. (2009). Challenging tensions: critical, theoretical and empirical perspectives on social enterprise. *International Journal of Entrepreneurial Behaviour & Research*, 14(5), 268–275. [Http://doi.org/10.1108/13552550810897641](http://doi.org/10.1108/13552550810897641)
- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment* (Vol. 17). Sage publications.
- Carsuard, A., & Brannback, M. (2011). Entrepreneurial Motivations : What Do We Still Need to Know ? *Journal of Small Business Management*, 49(1), 9–26.
- Cheung, W. G., & Rensvold, B. R. (2002). Evaluating Goodness-of-Fit Indexes for Testing Measurement Invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(2), 233–255. [Http://doi.org/10.1207/S15328007SEM0902](http://doi.org/10.1207/S15328007SEM0902)
- Chowdhury, I., & Santos, F. M. (2010). Scaling Social Innovations: The Case of Gram Vikas. *Director*, 0–35. [Http://doi.org/10.2139/ssrn.1553070](http://doi.org/10.2139/ssrn.1553070)
- Chowdhury Imran and Filipe Santos. (2010). *Gram Vikas: Social Entrepreneurship in*

- Rural India. Prologue Quarterly Of The National Archives* (Vol. 44).
- Christiansen, L. (2008). Faith-Based Social entrepreneurship: Business as Mission, (July 2000), 1–66. Retrieved from http://studenttheses.cbs.dk/bitstream/handle/10417/681/linda_christiansen.pdf?Sequence=1
- Cromie, S. (2000). Assessing entrepreneurial inclinations: Some approaches and empirical evidence. *European Journal of Work and Organizational Psychology*, 9(1), 7–30. [Http://doi.org/10.1080/135943200398030](http://doi.org/10.1080/135943200398030)
- Crossan, D., Ibbotson, P., & Bell, J. (2011). The hologram effect in entrepreneurial “social commercial” enterprises: Triggers and tipping points. *Journal of Small Business and Enterprise Development*, 18(4), 655–672. [Http://doi.org/10.1108/14626001111179730](http://doi.org/10.1108/14626001111179730)
- Dacin, P. A., M. T. Dacin, and M. Matear. 2010. “Social Entrepreneurship: Why We don’t Need a New Theory and How We Move Forward from Here.” *The Academy of Management Perspectives* 24 (3): 37–57.
- Datta, P. B., & Gailey, R. (2012). Empowering Women Through Social entrepreneurship: Case Study of a Women’s Cooperative in India. *Entrepreneurship: Theory and Practice*, 36(3), 569–587. [Http://doi.org/10.1111/j.1540-6520.2012.00505.x](http://doi.org/10.1111/j.1540-6520.2012.00505.x)
- Davidsson, P. (1995). Determinants of entrepreneurial intentions, 1–31. <http://eprints.qut.edu.au/2076/>
- Davidsson, P. (1995). Culture, structure and regional levels of entrepreneurship. *Entrepreneurship & Regional Development*, 7(1), 41-62.
- Deborah, S. E., & Ajzen, I. (1985). The intention, Perceived Control, and Weight Loss : An Application of the Theory of Planned Behavior. *Journal of personality and social psychology*, 49(3), 843–851. [Http://doi.org/10.1037//0022-3514.49.3.843](http://doi.org/10.1037//0022-3514.49.3.843)
- Dees, J. G. (1998). The meaning of social entrepreneurship. <http://www.redalmarza.cl/ing/pdf/TheMeaningofsocialEntrepreneurship.pdf>

- Dees, J. G., & Elias, J. (1998). The Challenges of combining Social and Commercial Enterprise. *Business Ethics Quarterly*, 8(1), 165–178.
- Dees, J. G. (2001). Philanthropy and enterprise: Harnessing the power of business and social entrepreneurship for development. *innovations*, 3(3), 119-132.
- Defourny, J., & Nyssens, M. (2010). Conceptions of Social Enterprise and Social Entrepreneurship in Europe and the United States: Convergences and Divergences. *Journal of Social Entrepreneurship*, 1(1), 32–53. [Http://doi.org/10.1080/19420670903442053](http://doi.org/10.1080/19420670903442053)
- Do Paço, A. M. F., Ferreira, J. M., Raposo, M., Rodrigues, R. G., & Dinis, A. (2011). Behaviours and entrepreneurial intention: Empirical findings about secondary students. *Journal of International Entrepreneurship*, 9(1), 20–38. [Http://doi.org/10.1007/s10843-010-0071-9](http://doi.org/10.1007/s10843-010-0071-9)
- Engle, R. L., Dimitriadi, N., Gavidia, J. V., Schlaegel, C., Delanoe, S., Alvarado, I., ... Wolff, B. (2010). Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behaviour. *International Journal of Entrepreneurial Behaviour & Research*, 16(1), 35–57. [Http://doi.org/10.1108/13552551011020063](http://doi.org/10.1108/13552551011020063)
- Ernst, K. (2014). *Heart over mind—An empirical analysis of social entrepreneurial intention formation on the basis of the theory of planned behaviour* (Doctoral dissertation, Universität Wuppertal, Fakultät für Wirtschaftswissenschaft/Schumpeter School of Business and Economics» Dissertationen).
- Farrington, S. M. (2012). Entrepreneurial attributes of undergraduate business students : a three-country c comparison revisited, 15(4), 333–351.
- Ferreira, J. J., Raposo, M. L., Gouveia Rodrigues, R., Dinis, A., & do Paço, A. (2012). A model of entrepreneurial intention. *Journal of Small Business and Enterprise Development*, 19, 424–440. [Http://doi.org/10.1108/14626001211250144](http://doi.org/10.1108/14626001211250144)
- Ferri, E., & Urbano, D. (2011). Social Entrepreneurship and Environmental Factors: a Cross-Country Comparison. *Universitat Autònoma de Barcelona, Barcelona*, (September). Retrieved from http://idem.uab.es/treballs_recerca/Elisabeth_Ferri.pdf

- Forster, F., & Grichnik, D. (2013). Social Entrepreneurial Intention Formation of Corporate Volunteers. *Journal of Social Entrepreneurship*, 4(2), 153–181. [Http://doi.org/10.1080/19420676.2013.777358](http://doi.org/10.1080/19420676.2013.777358)
- Gardner, H. (2004). A multiplicity of intelligence: In tribute to Professor Luigi Vignolo. Retrieved February, 11(1976), 2008. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/summary?Doi=10.1.1.73.364>
- Gartner, W. B. (2011). The Describing Framework for Conceptual Creation Venture Phenomenon of New, 10(4), 696–706.
- Gelderen, M. Van, Brand, M., Praag, M. Van, Bodewes, W., Poutsma, E., & Gils, A. Van. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6), 538–559. [Http://doi.org/10.1108/13620430810901688](http://doi.org/10.1108/13620430810901688)
- Gerba, D. T. (2012). Impact of entrepreneurship education on entrepreneurial intentions of business and engineering students in Ethiopia. *African Journal of Economic and Management Studies*, 3, 258–277. [Http://doi.org/10.1108/20400701211265036](http://doi.org/10.1108/20400701211265036)
- Ghani, E., Kerr, W. R., & O'Connell, S. (2013). Spatial Determinants of Entrepreneurship in India. *Regional Studies*, 48, 1071–1089. [Http://doi.org/10.1080/00343404.2013.839869](http://doi.org/10.1080/00343404.2013.839869)
- Hageman, A. M. (2013). The impact of corruption on firm tax compliance in transition economies: whom do you trust?. *Journal of business ethics*, 116(3), 479-494.
- Harding, R., (2006). Points of view Assessing the scale of the equity gap. *Journal of Small Business and Enterprise Development*, 13(1), 115-132.
- Hemingway, C. A. (2005). Personal Values as A Catalyst for Corporate Social Entrepreneurship. *Journal of Business Ethics*, 60(3), 233–249. [Http://doi.org/10.1007/s10551-005-0132-5](http://doi.org/10.1007/s10551-005-0132-5)
- Heuer, A., & Liñán, F. (2013). Testing alternative measures of subjective norms in entrepreneurial intention models. *International Journal of Entrepreneurship and Small Business*, 19(1), 39–49. [Http://doi.org/10.1504/IJESB.2013.054310](http://doi.org/10.1504/IJESB.2013.054310)

- Hockerts, K. (2014). Determinants of Social Entrepreneurial Intentions. *Academy of Management annual meeting proceedings*, (January).
[Http://doi.org/10.5465/AMBPP.2014.12465abstract](http://doi.org/10.5465/AMBPP.2014.12465abstract)
- Hockerts, K. (2015a). Antecedents of Social Entrepreneurial Intentions : A Validation Study. *Social Enterprise Journal*, 11(3), 260–280.
[Http://doi.org/10.5465/AMBPP.2013.16805abstract](http://doi.org/10.5465/AMBPP.2013.16805abstract)
- Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modelling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3(4), 424–453. [Http://doi.org/10.1037/1082-989X.3.4.424](http://doi.org/10.1037/1082-989X.3.4.424)
- Hwee Nga, J. K., & Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start-up intentions. *Journal of Business Ethics*, 95, 259–282. [Http://doi.org/10.1007/s10551-009-0358-8](http://doi.org/10.1007/s10551-009-0358-8)
- Iakovleva, T., & Kolvereid, L. (2009). An integrated model of entrepreneurial intentions. *International Journal of Business and Globalisation*, 3(1), 66.
[Http://doi.org/10.1504/IJBG.2009.021632](http://doi.org/10.1504/IJBG.2009.021632)
- Intellectap. (2012). On the Path To Sustainability and Scale: A study of India's Social Enterprise Landscape. *Intellectap Report*, (April), 66. Retrieved from www.intellectap.com
- Izquierdo, E. (2011). Competing models of entrepreneurial intentions : the influence of entrepreneurial self-efficacy and attitudes competing models of entrepreneurial intentions : the influence of entrepreneurial self-efficacy. *International Journal of Entrepreneurship and Small Business*, 13(1), 75–99.
- Khanapuri, V. B., & Khandelwal, M. R. (2011). Scope for fair trade and social entrepreneurship in India. *Business Strategy Series*, 12(4), 209–215.
[Http://doi.org/10.1108/17515631111155179](http://doi.org/10.1108/17515631111155179)
- Kirby, D. A., & Ibrahim, N. (2011). The case for (social) entrepreneurship education in Egyptian universities. *Education + Training*, 53(5), 403–415.
[Http://doi.org/10.1108/00400911111147712](http://doi.org/10.1108/00400911111147712)

- Koçoğlu, M., & Hassan, M. U. (2013). Assessing Entrepreneurial Intentions of University Students : A Comparative Study of Two Different Cultures : Turkey and Pakistani, 5(13), 243–252.
- Koe, J., Nga, H., & Shamuganathan, G. (2010). The Influence of Personality Traits and Demographic Factors on Social Entrepreneurship Start-Up Intentions. *Journal of Business Ethics*, 95(2), 259–282.
- Kolvereid, L. (1996). Prediction of Employment Status Choice Intentions. *Entrepreneurship Theory & Practice*, 21(1), 47–57.
- Kolvereid, L., Iakovleva, T., & Kickul, J. (2009.). “ A n integrated model of entrepreneurial intentions ” an integrated model of entrepreneurial intentions Lars Kolvereid , Tatiana Iakovleva , Jill Kickul Director , Stewart Satter Program in Social Entrepreneurship NYU – Stern School of Business.
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*, 21(6), 866–885. [Http://doi.org/10.1016/j.jbusvent.2005.06.008](http://doi.org/10.1016/j.jbusvent.2005.06.008)
- Krueger, N. (1993). Title: The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship Theory & Practice*, 18(1), 315–330.
- Krueger, N. (2000). Entrepreneurial Intentions are Dead : Long Live. In A. L. Carsrud & M.Brännback (Eds.), *Understanding the Entrepreneurial Mind, International Studies in Entrepreneurship* (pp. 51–72). Springer Science+Business Media. [Http://doi.org/10.1007/978-1-4419-0443-0](http://doi.org/10.1007/978-1-4419-0443-0)
- Krueger, N. (2006). So You Thought the Intentions Model Was Simple ? Cognitive Style and the Specification of Entrepreneurial Intentions Models Cognitive Style and the Specification of Entrepreneurial Intentions Models. *Ssrn electronic journal*, 10(2006). [Http://doi.org/10.2139/ssrn.1150881](http://doi.org/10.2139/ssrn.1150881)
- Krueger, N. F., & Brazeal, D. V. (1994). Entrepreneurial Potential and Potential Entrepreneurs. *Entrepreneurship Theory & Practice*, 18, 91–104.

- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions : Applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5, 315–330.
- Krueger, N. F., Kickul, J., Gundry, Li. K., Verman, R., & Wilson, F. (2007). Discrete Choices, Trade-offs, and Advantages: Modeling Social Venture Opportunities and Intentions. *International Perspectives on Social Entrepreneurship Research*, 1(Electronic Version), 117–143.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432. [Http://doi.org/10.1016/S0883-9026\(98\)00033-0](http://doi.org/10.1016/S0883-9026(98)00033-0)
- Lee, L., Wong, P. K., Foo, M. Der, & Leung, A. (2011). Entrepreneurial intentions: The influence of organizational and individual factors. *Journal of Business Venturing*, 26(1), 124–136. [Http://doi.org/10.1016/j.jbusvent.2009.04.003](http://doi.org/10.1016/j.jbusvent.2009.04.003)
- Light, P. C. (2006). Reshaping social entrepreneurship. *Stanford Social Innovation Review*, 4(3), 47-51.
- Liñán, F. (2004). Intention-based models of entrepreneurship education. *Piccola Impresa/Small Business*, 3, 11–35. Retrieved from <http://congreso.us.es/gpyde/DOWNLOAD/a9.pdf>
- Liñán, F., & Chen, Y. (2006). Intention-based models of entrepreneurship education. *Piccola Impresa/Small Business*, 3(1), 11-35..
- Liñán, F., & Chen, Y. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 33(3), 593–617.
- Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions : citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11(4), 907–933. [Http://doi.org/10.1007/s11365-015-0356-5](http://doi.org/10.1007/s11365-015-0356-5)
- Liñán, F., & Krueger, N. (2013). B British and S Spanish E entrepreneurial Intentions : A Comparative Study. *Revista de economía mundial*, 33, 73–103.

- Liñán, F., Rodríguez-cohard, J. C., & Rueda-cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels : a role for education. *Int Entrep Manag J*, 7, 195–218. [Http://doi.org/10.1007/s11365-010-0154-z](http://doi.org/10.1007/s11365-010-0154-z)
- Liu, G., Eng, T.-Y., & Takeda, S. (2015). An Investigation of Marketing Capabilities and Social Enterprise Performance in the UK and Japan. *Entrepreneurship Theory and Practice*, 39, 267–298. [Http://doi.org/10.1111/etap.12041](http://doi.org/10.1111/etap.12041)
- Lorz, M. (2011). The Impact of Entrepreneurship Education on Entrepreneurial Intention, (3966).
- Matthias Fink (2015). "Robustness of the theory of planned behaviour in predicting entrepreneurial intentions and actions." *Entrepreneurship Theory and Practice* 39, no. 3: 655-674.
- Mair, J., & Noboa, E. (2003). The emergence of social enterprises and their place in the new organizational landscape.
- Mair, J. (2008). Social entrepreneurship : taking stock and looking ahead. *World Entrepreneurship Forum, IESE Business School*, 1–17. <http://www.iese.edu/research/pdfs/di-0888-e.pdf>
- Mair, J., & Ganly, K. (2009). Social Entrepreneurship in Rural India: a Small Step Approach Towards Institutional Change, 3, 1–8.
- Mair, J., & Martí, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36–44. [Http://doi.org/10.1016/j.jwb.2005.09.002](http://doi.org/10.1016/j.jwb.2005.09.002)
- Mair, J., and I. Marti. 2006. "Social Entrepreneurship Research: A Source of Explanation, Prediction, and Delight." *Journal of World Business* 41 (1): 36–44.
- Mair, J., and E. Noboa. 2006. "Social Entrepreneurship: How Intentions to Create a Social Venture are Formed." In *Social Entrepreneurship*, edited by J. Mair, J. Robinson, and K. Hockerts, 121–135. London: Palgrave Macmillan UK.

- Mayer, D. J., P. Salovey, and R. D. Caruso. 2004. "Emotional Intelligence: Theory, Findings, and Implications. Department of Psychology. University of New Hampshire; Yale University." *Psychological Inquiry* 15 (3): 197–215.
- Mikolajczak, M., O. Luminet, and C. Menil. 2006. "Predicting Resistance to Stress: Incremental Validity of Trait Emotional Intelligence over Alexithymia and Optimism." *Psicothema* 18 (Supplement): 79–88.
- Mueller, S. 2011. "Increasing Entrepreneurial Intention: Effective Entrepreneurship Course Characteristics." *International Journal of Entrepreneurship and Small Business* 13 (1): 55–74.
- Mair, J., Robinson, J., & Hockerts, K. (2006). *Social Entrepreneurship*. New York: Palgrave Macmillan. [Http://doi.org/10.1057/9780230625655](http://doi.org/10.1057/9780230625655)
- Mair, J., Seelos, C., & Mair, J. (2006). Profitable business models and market creation in the context of deep poverty : a strategy view Christian Seelos profitable business models and market creation in the context of deep poverty : a strategic view, 3(7).
- Maree, G., Mort, S., Mort, G. S., Weerawardena, J., & Carnegie, K. (2003). Social Entrepreneurship : Toward Conceptualization. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1), 76–88. [Http://doi.org/10.1002/nvsm.202](http://doi.org/10.1002/nvsm.202)
- Markland, D. (2007). The golden rule is that there are no golden rules: A commentary on Paul Barrett's recommendations for reporting model fit in structural equation modelling. *Personality and Individual Differences*, 42, 851–858. [Http://doi.org/10.1016/j.paid.2006.09.023](http://doi.org/10.1016/j.paid.2006.09.023)
- Markus, K. A. (2012). Principles and Practice of Structural Equation Modeling by Rex B. Kline. *Structural Equation Modeling: A Multidisciplinary Journal*, 19(February), 509–512. [Http://doi.org/10.1080/10705511.2012.687667](http://doi.org/10.1080/10705511.2012.687667)
- Marzocchi, G. L., (2009, June). The foundation of entrepreneurial intention. In *Summer Conference* (pp. 17-19).
- Mayer, J. D., Salovey, P., Caruso, D. R., Inquiry, S. P., Taylor, P., Erlbaum, L., ...

- Caruso, D. R. (2014). Emotional Intelligence : Theory , Findings , and Implications, *15*(3), 197–215.
- Mcdonald, N. M., & Messinger, D. S. (2013). No The Development of Empathy: How, When and Why. *Free Will, Emotions, and Moral Actions: Philosophy and Neuroscience in Dialogue*, 1–36.
- Mcmullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial Action and the Role of Uncertainty in the Theory of the Entrepreneur. *Academy of Management Review*, *31*(1), 132–152. [Http://doi.org/10.5465/AMR.2006.19379628](http://doi.org/10.5465/AMR.2006.19379628)
- Morris, M. H. (2001). Towards integration: understanding entrepreneurship through frameworks In *Issues in Entrepreneurship* (pp. 21-46). Emerald Group Publishing Limited. (2001).. *Entrepreneurship and Innovation*.
- Nicholls, A. (2010). The Legitimacy of Social Entrepreneurship: Reflexive Isomorphism in a Pre-Paradigmatic Field. *Entrepreneurship Theory & Practice*, *34*(4), 611–634.
- Ormiston, J., & Seymour, R. (2011). Understanding Value Creation in Social Entrepreneurship: The Importance of Aligning Mission, Strategy and Impact Measurement. *Journal of Social Entrepreneurship*, *2*(November 2012), 125–150. [Http://doi.org/10.1080/19420676.2011.606331](http://doi.org/10.1080/19420676.2011.606331)
- Oyugi, J. L. (2011). The Mediating Effect of Self-Efficacy on the Relationship Between Entrepreneurship Education and Entrepreneurial Intentions of University Students. *Journal of Entrepreneurship, Management and Innovation*, *2*(2), 31–56.
- Peredo, A. M., & McLean, M. (2005). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, *41*, 56–65. [Http://doi.org/10.1016/j.jwb.2005.10.007](http://doi.org/10.1016/j.jwb.2005.10.007)
- Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of world business*, *41*(1), 56-65.
- Pirson, M. (2012). Social entrepreneurs as the paragons of shared value creation? A critical perspective. *Social Enterprise Journal*, *8*(1), 31–48. [Http://doi.org/10.1108/17508611211226575](http://doi.org/10.1108/17508611211226575)

- Poon, J. M. L. (2006). Effects of Self-concept Traits and Entrepreneurial Orientation on Firm Performance. *International Small Business Journal*, 24(1), 61–82. [Http://doi.org/10.1177/0266242606059779](http://doi.org/10.1177/0266242606059779)
- Prabhu, G. N. (1999). Social entrepreneurial leadership. *Career Development International*, 4(3), 140–145.
- Prahalad, C. K. (2009). C.K. Prahalad, *The Fortune at the Bottom of the Pyramid*. Wharton School Publishing, Philadelphia, 2004. 1, 1–7.
- Prieto, L. C. (2014). Is Wal-Mart a Social Enterprise? An Exploration of the Relationship Between Corporate Reputation, Corporate Social Responsibility & Financial Performance. *Academy of Strategic Management Journal*, 13(2), 51–61.
- Ramachandran, J., Pant, A., & Pani, S. K. (2012). Building the bop producer ecosystem: The evolving engagement of Fabindia with Indian handloom artisans. *Journal of Product Innovation Management*, 29(1), 33–51. [Http://doi.org/10.1111/j.1540-5885.2011.00877.x](http://doi.org/10.1111/j.1540-5885.2011.00877.x)
- Rametse, N. M., & Shah, H. (2012). Investigating Social Entrepreneurship in Developing Countries. *SSRN Electronic Journal*, 1–18. [Http://doi.org/10.2139/ssrn.2176557](http://doi.org/10.2139/ssrn.2176557)
- Rametse, N., & Shah, H. (2013). Investigating Social Entrepreneurship in Developing Countries. *World Review of Business Research*, 3(2), 95–112. [Http://doi.org/10.2139/ssrn.2176557](http://doi.org/10.2139/ssrn.2176557)
- Reise, S. P., Widaman, K. F., & Pugh, R. H. (1993). Confirmatory factor analysis and item response theory: two approaches for exploring measurement invariance. *Psychol Bulletin*, 114(3), 552–566. [Http://doi.org/10.1037/0033-2909.114.3.552](http://doi.org/10.1037/0033-2909.114.3.552)
- Roberts, B. D., & Woods, C. (2000). Changing the world on a shoestring : The concept of social entrepreneurship. *University of Auckland Business Review*, 7, 45–51. Retrieved from <http://www.uabr.auckland.ac.nz/files/articles/Volume11/v11i1-asd.pdf>
- Roper, J., & Cheney, G. (2005). The meanings of social entrepreneurship today. *Corporate Governance*, 5, 95–104. [Http://doi.org/10.1108/14720700510604733](http://doi.org/10.1108/14720700510604733)

- Rueda, S., Moriano, J. A., & Liñán, F. (2015). Validating a theory of planned behaviour questionnaire to measure entrepreneurial intentions. In A. Fayolle, P. Kyrö, & F. Liñán (Eds.), *Developing, Shaping and Growing Entrepreneurship* (pp. 60–78). Cheltenham, United Kingdom: Edward Elgar Publishing Ltd. [Http://doi.org/10.4337/9781784713584](http://doi.org/10.4337/9781784713584)
- Salovey, P., & Mayer, J. (1990). Emotional Intelligence. *Imagination, Cognition, and Personality*.
- Sánchez, J. C. (2010). University training for entrepreneurial competencies: Its impact on the intention of venture creation. *International Entrepreneurship and Management Journal*, 7(2), 239–254. [Http://doi.org/10.1007/s11365-010-0156-x](http://doi.org/10.1007/s11365-010-0156-x)
- Seelos, C., & Mair, J. (2005). Social entrepreneurship: Creating new business models to serve the poor. *Business Horizons*, 48, 241–246. [Http://doi.org/10.1016/j.bushor.2004.11.006](http://doi.org/10.1016/j.bushor.2004.11.006)
- Seth, S., & Kumar, S. (2011). Social Entrepreneurship: A Growing Trend in Indian Business. *Entrepreneurial Practice Review*, 1(3), 4–16. Retrieved from <http://www.entryerson.com/epr/index.php/jep/article/viewfile/66/49>
- Sewell, Jr., W. H. (1992). A Theory of Structure: Duality, Agency, and Transformation. *American Journal of Sociology*, 98(1), 1. [Http://doi.org/10.1086/229967](http://doi.org/10.1086/229967)
- Shane, S., Locke, E. A., & Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13(2), 257–279. [Http://doi.org/10.1016/S1053-4822\(03\)00017-2](http://doi.org/10.1016/S1053-4822(03)00017-2)
- Seth, S. & Kumar, S., 2011. Social Entrepreneurship: A Growing Trend in Indian Business. *Entrepreneurial Practice Review*, 1(3), pp.4–16. Available at: <http://www.entryerson.com/epr/index.php/jep/article/viewFile/66/49>.
- Shaw, E. & Carter, S., 2007. Social entrepreneurship. *Journal of Small Business and Enterprise Development*, 14(3), pp.418–434. Available at: <http://www.emeraldinsight.com/doi/abs/10.1108/14626000710773529> [Accessed November 18, 2014].

- Shukla, M. (2012). Introduction to Social Entrepreneurship. *SSRN Electronic Journal*, 1–3. [Http://doi.org/10.2139/ssrn.2071186](http://doi.org/10.2139/ssrn.2071186)
- Short, C.J., W., Moss, T. & T, L.G., 2009. Research in social entrepreneurship: past contributions and future opportunities. *Strategic Entrepreneurship Journal*, 3, pp.161–194. Available at: <http://discovery.ucl.ac.uk/1333395/>.
- Smith-hunter, A. E. (2008). Toward A Multidimensional Model Of Social Entrepreneurship: Definitions, Clarifications, And Theoretical Perspectives, 6(6), 93–112.
- Sonne, L. (2012). Innovative initiatives supporting inclusive innovation in India: Social business incubation and micro venture capital. *Technological Forecasting and Social Change*, 79(4), 638–647. [Http://doi.org/10.1016/j.techfore.2011.06.008](http://doi.org/10.1016/j.techfore.2011.06.008)
- Soubbotina, T. P. (2004). Beyond Economic Growth. *WBI Learning Resources Series, The World Bank*, 17–22. [Http://doi.org/10.1596/0-8213-5933-9](http://doi.org/10.1596/0-8213-5933-9)
- Spear, R., 2005. Social enterprise for work integration in 12 European countries : a descriptive analysis * by. *Annals of Public and Cooperative Economics*, 76(2), pp.195–231.
- Sriram, M. S. (2011). Profit or Purpose : The Dilemma of Social Enterprises Profit or Purpose : The Dilemma of Social Enterprises.
- Steyaert, C., & Hjorth, D. (2006). Entrepreneurship as social change. *Small*, 1–18.
- Tanabe, Y. (2012). Five stages of social entrepreneurship. *10th International Conference of the International Society for Third-Sector Research*, 1–22. Retrieved from internal-pdf://five_stages_of_social_entrem2775023616/five_stages_of_social_entre.docx
- Tiwari, P., Bhat, A. K., & Tikoria, J. (2017). Predictors of social entrepreneurial intention: an empirical study. *South Asian Journal of Business Studies*, 6(1), 53-79.
- Thompson, J. L. (2008). Social enterprise and social entrepreneurship: where have we reached? *Social Enterprise Journal*, 4(2), 149–161. [Http://doi.org/10.1108/17508610810902039](http://doi.org/10.1108/17508610810902039)

- Thorndike, R. L., & Stein, S. (1937). An evaluation of the attempts to measure social intelligence. *Psychological Bulletin*, 34(5), 275.
- Tkachev, A., & Kolvereid, L. (1999). Self-employment intentions among Russian students. *Entrepreneurship & Regional Development*, 11(3), 269–280.
[Http://doi.org/10.1080/089856299283209](http://doi.org/10.1080/089856299283209)
- Torres, R. (2010). Incomplete crisis responses: Socio-economic costs and policy implications. *International Labour Review*, 149(2), 227-237.
- Ullman, J. B. (2006). Structural equation modelling: reviewing the basics and moving forward. *Journal of Personality Assessment*, 87(1), 35–50.
[Http://doi.org/10.1207/s15327752jpa8701_0](http://doi.org/10.1207/s15327752jpa8701_0)
- Venkataraman, S.S. and S., 2000. The Promise of Entrepreneurship as a Field of Research. *The Academy of Management Review*, 25(1), pp.217–226.
- Van Auken, H., Stephens, P., Fry, F. L., & Silva, J. (2006). Role model influences on entrepreneurial intentions: A comparison between USA and Mexico. *The International Entrepreneurship and Management Journal*, 2(3), 325–336.
[Http://doi.org/10.1007/s11365-006-0004-1](http://doi.org/10.1007/s11365-006-0004-1)
- Vinogradov, E., Kolvereid, L. & Timoshenko, K., 2013. Predicting entrepreneurial intentions when satisfactory employment opportunities are scarce. *Education + Training*, 55(7), pp.719–737. Available at: <http://www.emeraldinsight.com/10.1108/ET-06-2012-0067>.
- Vansandt, C. V, Sud, M., Marmé, C., Vansandt, C. V, & Marme, C. (2009). Catalysts for Social Entrepreneurship. *Journal of Business Ethics*, 90(Supplement 3), 419–428.
- Venkataraman, S. S. And S. (2000). The Promise of Entrepreneurship as a Field of Research. *The Academy of Management Review*, 25(1), 217–226.
- Walter, S. G., & Dohse, D. (2009). *The interplay between entrepreneurship education and regional knowledge potential in forming entrepreneurial intentions* (No. 1549). Kiel Working Paper.
- Wang, H., Pan, J., & Li, J. (2009). Leadership performance of social entrepreneur in

- social entrepreneurship service, does personal value matters? *Proceedings - International Conference on Management and Service Science, MASS 2009*, 1–4. [Http://doi.org/10.1109/ICMSS.2009.5301452](http://doi.org/10.1109/ICMSS.2009.5301452)
- Welsh, D. H., & Krueger, N. (2009). Social? Sustainable? Entrepreneurship? A first look at mental prototyping of" social" entrepreneurship (summary). *Frontiers of Entrepreneurship Research*, 29(21), 5.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship: Theory and Practice*, 31(617), 387–406. [Http://doi.org/10.1111/j.1540-6520.2007.00179.x](http://doi.org/10.1111/j.1540-6520.2007.00179.x)
- 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), 752–774. [Http://doi.org/10.1108/14626000810917843](http://doi.org/10.1108/14626000810917843)
- Yunus, M., Moingeon, B., & Lehmann-Ortega, L. (2010). Building social business models: Lessons from the Grameen experience. *Long Range Planning*, 43(2–3), 308–325. [Http://doi.org/10.1016/j.lrp.2009.12.005](http://doi.org/10.1016/j.lrp.2009.12.005)
- Yunus, M., (2006). Building social business models: lessons from the Grameen experience. *Long range planning*, 43(2), 308-325.
- Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24(5), 519–532. [Http://doi.org/10.1016/j.jbusvent.2008.04.007](http://doi.org/10.1016/j.jbusvent.2008.04.007)
- Zampetakis, L. A. (2011). The measurement of trait emotional intelligence with unique-SF : An analysis based on unfolding item response theory models. In *Research on Emotion in Organizations* (pp. 289–315). Emerald Group Publishing Limited. [Http://doi.org/10.1108/S1746-9791\(2011\)0000007016](http://doi.org/10.1108/S1746-9791(2011)0000007016)
- Zampetakis, L. A., Gotsi, M., Andriopoulos, C., & Moustakis, V. (2011). Creativity and entrepreneurial intention in young people Empirical insights from business school students. *The International Journal of Entrepreneurship and Innovation*, 12(3), 189–199. [Http://doi.org/10.5367/ijei.2011.0037](http://doi.org/10.5367/ijei.2011.0037)

- Zampetakis, L. A., Kafetsios, K., Bouranta, N., Dewett, T., & Moustakis, V. S. (2009). On the relationship between emotional intelligence and entrepreneurial attitudes and intentions. *International Journal of Entrepreneurial Behaviour & Research*, 15(6), 595–618. [Http://doi.org/10.1108/13552550910995452](http://doi.org/10.1108/13552550910995452)
- Zampetakis, L. A., & Moustakis, V. (2006). Linking creativity with entrepreneurial intentions: A structural approach. *International Entrepreneurship and Management Journal*, 2(3), 413–428. [Http://doi.org/10.1007/s11365-006-0006-z](http://doi.org/10.1007/s11365-006-0006-z)
- Zeyen, A., Beckmann, M., Mueller, S., Dees, J. G., Khanin, D., Krueger, N., ... Zacharakis, A. (2012). Social Entrepreneurship and Broader Theories: Shedding New Light on the “Bigger Picture.” *Journal of Social Entrepreneurship*, (August 2015), 1–20. [Http://doi.org/10.1080/19420676.2012.725422](http://doi.org/10.1080/19420676.2012.725422)
- Ziegler, R. (2009). An Introduction to Social Entrepreneurship: Voices, Preconditions, Contexts. In R. Ziegler (Ed.), *An introduction to social entrepreneurship - Voices, preconditions, contexts* (pp. 1–18). Cheltenham, UK • Northampton, MA, USA: Edward Elgar Publishing Ltd.

LIST OF PUBLICATIONS

A. Journal Publication

- Preeti Tiwari, Anil K. Bhat, Jyoti Tikoria “Investigation into Determinants Of Social Entrepreneurial Intentions”. (*Entrepreneurship Theory & Practice Journal, Scopus and ABDC indexed, category A**) (*Revise and Resubmit*).
- Preeti Tiwari, Anil K. Bhat, Jyoti Tikoria “The Role of Prosocial Personality in Predicting Social Entrepreneurial Intentions”. (*Journal of Business Ethics, Scopus and ABDC indexed, category A*) (*Revise and Resubmit*).
- Preeti Tiwari, Anil K. Bhat, Jyoti Tikoria, (2017) "Predictors of social entrepreneurial intention: an empirical study", South Asian Journal of Business Studies, Vol. 6 Iss: 1, pp. -DOI <http://dx.doi.org/10.1108/SAJBS-04-2016-0032>. (Scopus and ABDC indexed). (**Published**)
- Preeti Tiwari, Anil K. Bhat, Jyoti Tikoria “The Role of Emotional Intelligence and Self-Efficacy on Social Entrepreneurial Attitudes and Social Entrepreneurial Intentions”. (*Journal of Social Entrepreneurship, Scopus and ABDC indexed*). (**Published**).
- Preeti Tiwari, Anil K. Bhat, Jyoti Tikoria, (2017) “The Role of Higher Education and Personality traits in Predicting Social Entrepreneurial Intention”. (*Education + Training, Journal, Scopus and ABDC indexed*). (*Accepted for publication*)
- Preeti Tiwari, Anil K. Bhat, Jyoti Tikoria “An Empirical Analysis of the Factors Affecting Social Entrepreneurial Intentions” *Journal of Global Entrepreneurship Research Volume7*(1), 9. DOI-10.1186/s40497-017-0067-1. (*Thomson Reuters Index*) (**Published**)
- Preeti Tiwari, Anil K. Bhat, Jyoti Tikoria “The Effect of Social Entrepreneurial Education, Empathy and Moral obligation on social entrepreneurial attitude and Intentions” (*Social Enterprise Journal, Scopus and ABDC indexed*), (*Accepted for publication*).

MANUSCRIPTS UNDER REVIEW

- Preeti Tiwari, Anil K. Bhat, Jyoti Tikoria “Assessing the role of prior family business background, role model and entrepreneurial self-efficacy in predicting social entrepreneurial intentions” (*Entrepreneurship and Regional development, Scopus and ABDC indexed, category A*)
- Preeti Tiwari, Anil K. Bhat, Jyoti Tikoria “Role of Gender and Birth order in influencing student’s perception toward Social entrepreneurship”. (*The International Journal of Entrepreneurial Behavior & Research, IJEER*).
- Preeti Tiwari, Anil K. Bhat, Jyoti Tikoria “The Future of Social Entrepreneurship in India”. (*Economic & Political Weekly*).

B. Paper presented/published/accepted at International Conferences

- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2018) “Identifying the role of antecedents on Social Entrepreneurial Intentions Formation”, accepted for presentation at the 2018 Sustainability Ethics and Entrepreneurship Conference, at Colorado State University in Washington, DC, on March 2-4, 2018,
- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2018), “The Effect Of Emotional Intelligence, Moral And Perceived Social Pressure On Predicting Social Entrepreneurial Intention: A Field Research”, accepted for presentation at PAN IIM WMC 2017.

- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2017) "The Mediating Role of Subjective Norms in the Formation of Social Entrepreneurial Intentions", accepted for presentation in Divisional Paper session at the 2017 Academy of Management Meeting (AOM) on August 4-8 in Atlanta, Georgia.
- **(Received Excellent Paper Award)** Tiwari, P., Bhat, A. K. and Tikoria, J. (2016) "Exploring the Factors Responsible for Predicting Entrepreneurial Intention Among Nascent Entrepreneurs: A Field Research" 9th Annual Conference of the Academy of Innovation and Entrepreneurship, organised at University of Sydney, Australia on September 2nd & 3rd, 2016.
- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2017) "The Role of Prosocial Personality in Predicting Social Entrepreneurial Intentions" in IMR Doctoral Students Conference (IMRDC) on January 11 & 12, 2017 held at IIM Bangalore.
- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2017) "Empirically investigating the role of cognitive attitudes in predicting social entrepreneurial intentions among students in India" in COSMAR15 on 24th-25th November at IISc Bangalore.
- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2017) "The effect of emotional intelligence, empathy and perceived social pressure on predicting social entrepreneurial intention" International Conference on Methodological Issues in Social Entrepreneurship Knowledge and Practice, on 18-20 January 2017 at TISS Mumbai.
- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2015) "Relationship between Entrepreneurship Education and Entrepreneurial Intentions: A validation study", ICIER-IIMB International Conference on Entrepreneurship Education and Training: Design, Delivery and Effectiveness organised by IIM Bangalore on 29-31 January 2015.
- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2015) "Social entrepreneurship: Rise of New hybrid sector", Eleventh Biennial Conference on Entrepreneurship, organised by Entrepreneurship Development Institute of India, Ahmedabad on 18- 20 February 2015.
- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2013), "Entrepreneurial Intention Models: A Literature Review" in the Eleventh AIMS International Conference jointly organized by Institute of Management Technology, Ghaziabad (IMT-Ghaziabad) and the Association of Indian Management Scholars (AIMS) at IMT Ghaziabad Campus on 21-24 December 2013.
- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2013) "Review of Social Entrepreneurship and Future Research Agenda" Tenth AIMS International Conference jointly organised by Indian Institute of Management, Bangalore (IIM-B) and the Association of Indian Management Scholars (AIMS) at IIM Bangalore Campus on 6-9 January 2013.
- Tiwari, P.; Bhat, A. K. and Tikoria, J. (2013) "Review Paper on Examining the Role of Factors Affecting Social Entrepreneurship Intention", Tenth Biennial Conference on Entrepreneurship, organised by Entrepreneurship Development Institute, Ahmadabad on 20-22 February 2013.

C. Book Chapters

- Tiwari, P.; Bhat, A. K. and Jyoti, (2016) Chapter 9 edited volume (book) titled "Entrepreneurship Education: Experiments with Curriculum, Pedagogy and Target Groups" edited by Dr Mathew J Manimala and Dr Princy Thomas published by Springer Nature Singapore Pte Ltd.

- Tiwari, P.; Bhat, A. K. and Jyoti, Chapter entitled "Factors affecting Individual's Intention to Become a Social Entrepreneur", (accepted for publication) book titled Social Entrepreneurship and Sustainable Business Models in India edited by Anirudh Agarwal and Payal Kumar published by Palgrave Macmillan.

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MS. PREETI TIWARI is a Gold medalist in her Masters in Human Resource Management in the year 2009 from Mohanlal Sukhadia University, Udaipur (Rajasthan). Her areas of research interest are Entrepreneurship, Social Entrepreneurship and Human Resource Management. From her PhD research work, she has come with more than 19 publications in International journals and conferences of high repute. A few more research papers from her research work are under revision in International journals of high repute (Entrepreneurship Theory and Practice, Journal of Business Ethics). Apart from academics, she herself is a social entrepreneur being Co-founder of a social startup working for Safe motherhood in tribal regions of Orissa.

BRIEF BIOGRAPHY OF SUPERVISOR

PROF. ANIL K BHAT graduated in Mechanical Engineering in 1982 from REC, (now NIT) Srinagar and obtained his doctorate (fellowship) from IIM-Bangalore. His specialization is Marketing Research and his methodological contribution has been in the area of “Cluster analysis of rank order data”. He is a member of Academy of Management (AOM), American Marketing Association (AMA) and a Fellow of Institution of Engineers (India). He has been trained at international workshops conducted by Haas School of Business, University of California, Berkeley and STVP, Stanford & has completed "10,000 Women Program: Tools for Growing your Business" organised by Goldman Sachs in partnership with London Business School. Prof. Bhat has worked in a managerial capacity for organizations before turning to academics and has headed the Department of Management at BITS Pilani for almost a decade. He has more than eighty publications to his credit and has conceptualized, designed and conducted many MDP's both for private as well as for public sector companies. He has served as a management expert on Union Public Service Commission expert panel. He has been certified as an Entrepreneur Educator by STVP Stanford, NEN and IIMB. Besides guiding many PhD's, he has co-authored a book on management published by Oxford University Press. He is presently Professor, Department of Management BITS Pilani, Member, Department Research Committee and Faculty Advisor, Center for Entrepreneurial Leadership (CEL) at BITS-Pilani. He believes that Business is a force for Good and his Management Philosophy is anchored around the Goal of Maximizing the Impact of Individual Actions for the Good of Society.

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