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## Article

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# An empirical analysis of the factors affecting social entrepreneurial intentions

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## Abstract

The present study aims at identifying the social entrepreneurial intention among undergraduate students in Indian context by using the theory of planned behaviour as the research framework. A 72 item questionnaire was responded by 390 students of premier technical universities of India. A method of sampling used was systematized random sampling. 69% ( $N = 269$ ) of the respondents were male and 31% ( $N = 121$ ) were female and the average age of the respondents was approximately 20 years. The questionnaire measured emotional intelligence, creativity, and moral obligation, attitude toward becoming a social entrepreneur, subjective norms and perceived behavioural control. The result shows that the proposed model in the present study explains 47% of the variance, explaining the social entrepreneurship intention. Creativity showed a strongest positive relationship followed by emotional intelligence. This research study contributes to the social entrepreneurship literature by introducing emotional intelligence and creativity as new antecedents that also explains social entrepreneurial intention formation.

**Keywords:** Emotional intelligence, Creativity, Moral obligation, The theory of planned behaviour, Social entrepreneurship, Intentions

## Background

The recent economic crisis and global recession have increased the tremendous need to position social question in the heart of the economy. 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” (Nicholls 2010). The concept of ‘social entrepreneurship’ has been quickly emerging in the private, public and non-profit sectors over the last few years (Anderson et al. 2006). Social entrepreneurship is especially important in developing countries, where gaps in terms of social development and economic discrimination still exist (Chell 2007). It can be considered as a catalyst in the form of social capabilities and conquer inequalities across different spheres (social, economic and political) that can bridge the gap by making social and economic development desirable (Light 2006; Mair 2008; Seelos and Mair 2005).

“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

enterprises provide an ingenious idea towards providing commodities, services and earning opportunities to the economically weaker section of the society. Although an incipience of social enterprises has already started evolving at some locations in India. But the inconsistency of the context for social enterprises is evident in India, and it becomes quite difficult in regions badly seeking the development-focused innovation. This condition acts as a clarion call for many Indians to become social entrepreneurs.

As compared to population growth, the rate of social entrepreneurship is still low in India. The fact that social entrepreneurship growth is low in India is actually a “problem” as the country may have omitted out a novel path to support its citizens (Datta and Gailey 2012). Social entrepreneurship is desirable for development of India, however, the current speed is slow. This raises an important question to policy makers as for how can social entrepreneurial activities enriched and increased in India?

Krueger (Krueger 1993) suggested that entrepreneurship can only increase if the overall quality and quantity of entrepreneurship is nurtured and this can only be nurtured if entrepreneurship thinking grows. 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 Martí 2006; Koe et al. 2010). To encourage and support the social enterprises, it is required to closely analyze 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.

This study focuses on identifying how social entrepreneurship intention is created. Academic literature in the field of social entrepreneurship is rather limited this study aims at identifying the effect of emotional intelligence, creativity and moral obligation in predicting social entrepreneurial intention among the young Indian population by using the theory of planned behaviour as the theoretical framework.

### **Social entrepreneurship**

The roots of social entrepreneurship lie in the evolution of the private sector. Though for a long time, the symbiosis of government, business, and non-profit organisations 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 developed (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 et al. 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.

Social enterprises offer an innovative approach to bringing the desired change through reconceptualising the mission of the enterprise and rethinking of value creating logic (Brown and Wyatt 2015). Social entrepreneurship starts on comprehending a social opportunity, then passes it on into an enterprise model, amasses the necessary resources for execution, gives life to and nurtures the enterprise and eventually reaches the intended destination (Doherty et al. 2014). Despite the increasing attention paid to the sector through the availability of capital, a maturing government support system

and development of micro-finance model yet a corresponding body of academic work has not emerged to assess or inform practice (Dichter et al. 2013).

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. Firstly, social entrepreneurship is considered as a by-product of bigger concepts of social innovation and entrepreneurship, hence there is a lack of theoretical literature related to social entrepreneurship and a lack of consensus regarding how to define social entrepreneurship has not been achieved. Secondly, social entrepreneurship research is caught in between seemingly contradictory demands for significance and intractability (Mair and Martí 2006). One of the most prominent questions that cannot be adequately answered is ‘how to define social entrepreneurship’? As several researchers have pointed out that all business is social in the sense that it creates value (Spear 2005). Dees (Dees 1998) defined the role of the social entrepreneur in the development of society. In brief, this definition can be stated as follows: social entrepreneurs play the role of change agents in the social sector, by

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

Thus on the basis of literature, *“social entrepreneurship is a process that begins with perceived social opportunity, transfers it into an enterprise model, determines 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 organization to partnering with another firm (Short et al. 2009). Researchers identified that social entrepreneurship is a process that can create value by utilizing resources in innovative ways (Shaw and Carter 2007). For fulfilling their primary motives, social enterprises explore and exploit opportunities that can create social value by facilitating social change or meeting social needs (Prieto 2014).

### **Development of social entrepreneurship in India**

Social entrepreneurs are considered as the key players in delivering basic services and opportunities to the untouches sectors of India. 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 (Intellect 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).

India’s current population is 1.32 billion (132 crores) and it also has world’s second-largest labour force of 516.3 million people. 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 (Bureau 2015). This signifies that every third Indian is deprived of even basic necessities like nutrition, education, and health care and many are still wracked by unemployment and illiteracy (Shaw and de Bruin, 2013). Social entrepreneurs can prove helpful in eradicating these issues by placing those less fortunate on a pathway towards a meaningful life (Lans et al. 2014). India is set to become the world's youngest country with 64% of its population in the working age group (Bureau 2015). If this major chunk of the young population in India is encouraged to take up social entrepreneurship, it will impact the Indian economy significantly not only addressing the problem of unemployment but also several social problems in an affordable manner.

This motivated the authors to investigate what factors affect the intention formation process so as to encourage young generation toward social entrepreneurship. Social entrepreneurship in the context of India is still an understudied topic with limited research studies that usually fall short of empirical data to support. 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). Selective research studies conducted in India in the field of social entrepreneurship are shown in Table 1.

Most of the literature available in the field of entrepreneurial intention or more specifically social entrepreneurship came from Europe and other Western countries. Despite the fact that most of the renowned social enterprises work in the South Asian continent but still empirical research in this part of the world is almost negligible. 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. The most familiar socio-cultural factors influencing entrepreneurship are education, religion, caste, family background and social background. In her article Shradha (Shradha et al. 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

**Table 1** Social Entrepreneurial Studies in India

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

study concentrates on how social entrepreneurship intentions get generated in India. This paper tries to bridge this gap and validate the social entrepreneurial intention model in the Indian context. Ethnically, India has possessed a unique set of sensitivities and socio-psychological mindset.

The objectives of this study are:

- 1) To validate the role of the theory of planned behaviour in predicting social entrepreneurial intentions.
- 2) To develop a conceptual model and empirically test the effect of emotional intelligence, creativity and moral obligation on social entrepreneurial intentions.

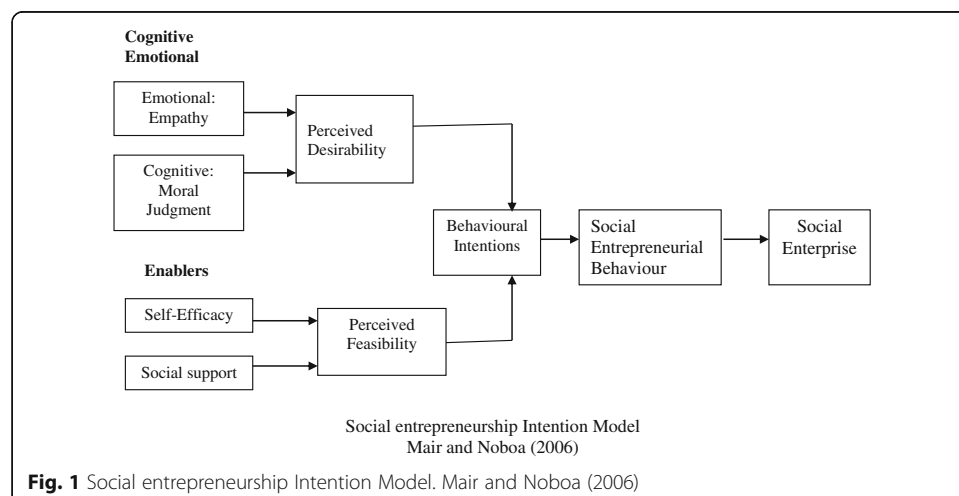
In the present study, the sample population of young undergraduates of a premier technical university in India is taken.

### Theoretical background

In the previous sections of this paper, researchers highlighted the meaning of social entrepreneurship and its development in India. In this section, authors discuss the existing social entrepreneurial model and other important research studies dealing with the social entrepreneurial intentions.

The first attempt to develop a model that can capture social entrepreneurial intention 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 intention suggested that intention to start social enterprise develops 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 & social support (Mair and Martí 2006). Figure 1 shows Mair and Noboa (2006) social entrepreneurial intention model.

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 an 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 intention process (Mair and Martí 2006). After that, some attempts were made by researchers in predicting social entrepreneurial intention formation. In the next paragraph, we discuss intention studies' conducted in the field of social entrepreneurship.

VanSandt, Sud, and Marme (VanSandt et al. 2009) tried to test social intention 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).

Koe Hwee Nga & Shamuganathan (Hwee 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 (Hwee 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 & Ibrahim (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 policy makers 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.

Ernst (Ernst 2011) carried out another research study to test social entrepreneurial intention on a sample of 203 students from four different German universities. She used antecedents like the personality traits, role model, age, gender, education, and experience to predict the social entrepreneurial intention. Effect of these antecedents was mediated by variables taken from the theory of planned behaviour. In Ernst (Ernst 2011) study she failed to find out any link between empathy and social entrepreneurial intention. To validate the Mair and Noboa (2006), model an attempt has been made by Forster and Grichnik (Forster and Grichnik 2013). In their paper, they adapt Mair and Noboa (2006) model and test its applicability on the sample of 159 corporate volunteers. They replaced perceived social support with perceived collective efficacy and defined it as the type of environment and guidance organization provide to explore opportunities and develop social ties (Forster and Grichnik 2013).

After this, a few researchers came up with some related models. Kai Hockerts (Hockerts 2015, 2017) made an attempt to validate the model of Mair and Noboa. 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 intention. Kai Hockerts (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 intention (Hockerts 2015).

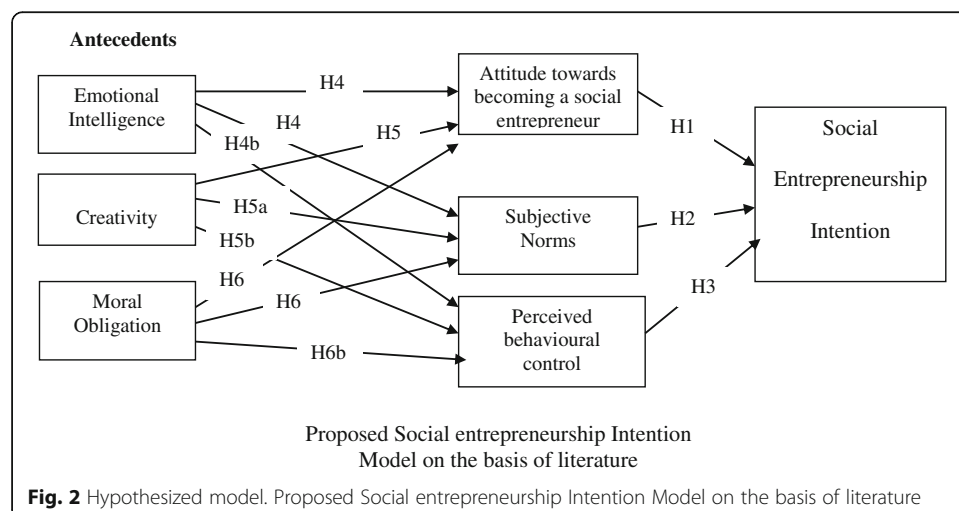
Although few research studies tried to empirically test the effect of antecedents on social entrepreneurial intentions but these studies are mere replications of each other. The major limitations of Ernst (Ernst 2011) research study were that in spite of the fact they measure the intention of management 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 Tolbert et.al. (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 (Forster and Grichnik 2013) model is that they used corporate social volunteers to predict social intention formation process. But comparing corporate volunteers with social entrepreneurship is not advisable (Hockerts 2015).

Thus, the basic purpose of this study is to find out the relationship between exogenous factors and intention among undergraduate students of the premier technical university in India. Social entrepreneurship is indeed attracting increasing attention from the academic and managerial bodies, while there are still many aspects that remain unexplored. Hence the particular study aims at discussing some new antecedents of the social entrepreneurial intentions. The identification of appropriate antecedents is based on literature review. Social entrepreneurs used an intellectual framework that motivates them to “thinking outside the box” and come up with creativity solutions. It is true that social entrepreneur takes bold and creative steps but creativity is in turn encouraged by situations. Thus the process of social entrepreneurial activity relies on the course of emotional intelligence followed by creativity, and not on creativity alone.

On the basis of literature, authors propose following theoretical framework to test social entrepreneurial intention among Indian students. (Refer Fig. 2.)

### Proposed research model

Following section covered explanation of proposed model.





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).

In the field of entrepreneurial intention research various intention models were proposed to study the development of intentions. These include the models proposed by Bird (1988) and developed by Boyd & Vozikis, (Boyd and Vozikis 1994), by Shapero (1975; Shapero & Sokol, 1982) which was tested by Krueger (Krueger 1993), and by Davidsson's, (Davidsson 1995), which was used and modified by researchers to test intentions in university context. These 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). These factors/antecedents are categorized as cognitive, motivational/non-motivational or situational (Liñán and Chen 2009; Shane et al. 2003; Venkataraman and Shane 2000).

Shook et al. (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 (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 & 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 Kickul 2006). 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 paper, the theory of planned behaviour is adopted as a research framework the major advantages of the TPB is explained in the later part of the paper. 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). Therefore, in this paper, the theory of planned behaviour is adopted as a mediator to measure the result between antecedents and social entrepreneurial intentions.

### **The theory of planned Behaviour (TPB)**

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). TPB is based on the idea that intention to carry out specific behaviour is are 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 intention 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 but 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; 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). Ajzen (Ajzen 1996) himself emphasised regarding the expansion of the classical model by adding antecedents of ATB, PBC, and SN 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). Therefore, this research study uses a theory-driven approach to testing how exogenous factors (emotional intelligence, creativity, and moral obligation) affect attitudes, intentions, and behaviour.

## **Hypothesis development**

### **Social entrepreneurial intention (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 intention in many different ways. Bird (Bird 1998) defines intention as a state of mind that motivates a person toward a certain goal or a path (Bird 1998). Intention can be considered as a precondition that governs planned behaviour (Souitaris et al. 2007). According to Krueger (Krueger and Brazeal 1994), "Entrepreneurial intention can be defined as the commitment of a person towards some future behaviour, which is projected toward starting, a business or an organization". Various research studies emphasise the importance of intentions as one of the crucial constructs in predicting planned behaviour (Krueger and Brazeal 1994). The entrepreneurial intention is thus an indispensable tendency towards formation of an enterprise and is also an emerging research area that attracts a substantial number of researchers. Ziegler (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).

### **Attitude towards becoming a social entrepreneur (ATB)**

The variable ATB refers to the degree to which a person has a good or bad assessment or evaluation of the behaviour in question. ATB refers one's personal pull towards

particular target behaviour. The most sought out construct of intention in the TPB is the attitude toward behaviour (ATB). According to Ajzen and Fishbein (Ajzen et al. 1980), ATB is “person’s good or bad assessment toward performing or not to perform certain behaviour” (Ajzen et al. 1980). Thus, attitude is different from the traits in respect to the evaluative nature towards certain specific intention (Armitage and Conner 2001). In the entrepreneurial intention studies, ATB proved to be an important factor that affects intention in a positive manner (Erikson 1998; Koçoğlu and Hassan 2013). In many studies, ATB proved as strongest or second strongest predictor of entrepreneurial intentions followed by perceived behavioural control (Krueger and Brazeal 1994). Therefore, for the purpose of this research study, we adopt 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. Therefore, following hypothesis formed:

*H1: Attitude towards becoming a social entrepreneur has a positive effect on social entrepreneurial intentions.*

#### **Subjective norms (SN)**

It refers to the perceived social pressure to execute or not to execute the behaviour which comprises the pressure of family, friends and other important people. Ajzen defined SN as “the person’s perception of social pressure to perform or not to perform the behaviour under consideration” (Ajzen and Fishbein 1977). Researcher unanimously agreed about the societal pressure in carrying out certain behaviour but not aligned regarding the actual source of pressure (Liñán 2004). Subjective norms always considered as the most conflicting element in the theory of planned behaviour. Meta-analysis study conducted by (Armitage and Conner 2001) found subjective norms as the weak predictor of entrepreneurial intentions.

The role of subjective norms within the theory of planned behaviour has been discussed by many prominent researchers, stating its importance in predicting entrepreneurial intention. One stream of researchers found out that subjective norms have an insignificant role in predicting intentions (Krueger et al. 2000, Autio, et al. 2001, Linan, 2008), some researchers found out that subjective norms do play a significant role in predicting entrepreneurial intentions (Iakovleva and Kolvereid 2009; Kolvereid 1996) and some researcher completely ignore subjective norms while measuring the intention process (Peterman and Kennedy 2003; Veciana et al. 2005).

In the social entrepreneurial intention study, Ernst (Ernst 2011) also found the insignificant relationship between subjective norms and the antecedents used in the study. However, a direct relationship between SN and social entrepreneurial intentions found to be a significant one in her study.

India is a society with clear collectivistic traits this means that high preference is given to the social framework. Family, friends and various other associated sub-groups affect individual decision making process. Thus it is very important to measure the whether or not subjective norms will be helpful in predicting the social entrepreneurial intentions. Therefore, researcher formed the following hypothesis:

*H2: Subjective norms have a positive effect on social entrepreneurial intentions.*

### **Perceived Behavioural control (PBC)**

PBC can be considered as the antecedent for the actual levels of control (Armitage and Conner 2001). More specifically PBC is the individual belief about his/her ability for carrying out the certain task. 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 intention. Liñán and Chen (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 intention 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 perceived behavioural control is not considered as equivalent to self-efficacy. 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.

Therefore following hypothesis formed on the basis of above explanation:

*H3: Perceived behavioural control has a positive effect on social entrepreneurial intentions*

### **Emotional intelligence (Emin)**

The term emotional intelligence was first popularised by Thorndike in 1920 when he identified the relationship of emotional intelligence with 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 (Gardner 2004) 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 recognize 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. (Zampetakis et al. 2009) tried to find out the effect of emotional intelligence on creativity, proactivity and on attitude toward becoming an entrepreneur. Zampetakis, (Zampetakis et al. 2009) in his study found out that emotional intelligence positively affects creativity, proactivity and play an important role in the development of the attitude.

Various research studies emphasised the importance of emotional intelligence regarding managing stress and emotional breakdown (Tsaousis and Nikolaou 2005; Slaski and Cartwright 2002). Managing stress is often link with a positive attitude toward entrepreneurship and entrepreneurial intentions. The role of emotional intelligence in order to predict social entrepreneurial intentions have not been studied yet. Emotional intelligence is also very important for social entrepreneurs as they have to provide a creative solution to the unmet demands of the society. Hence channelling and managing emotions and feelings can provide social entrepreneurs with an important competitive edge. For that reason, it is always good to use emotional intelligence in order to predict social entrepreneurial intentions. Therefore following hypothesis formed on the basis of above explanation:

*H4: Emotional intelligence has a positive effect on the attitude towards becoming a social entrepreneur.*

*H4a: Emotional intelligence has a positive effect on the Subjective norms*

*H4b: Emotional intelligence has a positive effect on perceived behavioural control.*

### **Creativity (Cr)**

Creativity is normally defined as the process to create something new and valuable. David Bohm (Böhm and Nichol 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 (Yar 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 et al. 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 intention formation. Researchers like Gorman et al. (Gorman et al. 1997), Feldman and Bolino (Feldman and Bolino 2000) and Hamidi et al. (Yar Hamidi et al. 2008) found that high creativity scores positively affect the intention formation process. Zampetakis et al. (Zampetakis et al. 2009, Zampetakis 2011) in their research study proved that creativity not only affects the intention process but also d positively associated with the attitude toward choosing entrepreneurship as a career.

Creativity is an eternal part of social entrepreneur personality. Leadbeater (Leadbeater 1997) defined social entrepreneurs as change agents that provide creative and innovative solutions to the most pressing and intractable social problems. Prabhu (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 in social entrepreneurship. Ernst (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 (Ernst 2011) suggested that creativity as an antecedent of the social entrepreneurial intention required further investigation.

Therefore, in this research study, we use creativity as an antecedent to social entrepreneurial intention.

Therefore following hypothesis formed on the basis of above explanation:

*H5: Creativity has a positive effect on the attitude towards becoming a social entrepreneur.*

*H5a: Creativity has a positive effect on the Subjective norms*

*H5b: Creativity has a positive effect on perceived behavioural control.*

### **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 (Beugré 2016).

Mair and Noboa first used moral obligation in their proposed model for social entrepreneurial intention (Mair & 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 (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 (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 & Noboa (2006) and Kai Hockert (Hockerts 2015). In the first study conducted by Mair and Noboa (2006), they adopted moral obligation as the antecedent for social desirability. Mair & 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. Hockert (Hockerts 2015) adopted Haines et al. (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 Hockert’s (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 intention that addressing a particular social problem is the appropriate thing to do. Based on the above discussion we next propose the following hypothesis:



*H6: Moral obligation towards helping underprivileged people is positively related to attitude towards becoming a social entrepreneur*

*H6a: Moral obligation towards helping underprivileged people is positively related to subjective norms.*

*H6b: Moral obligation towards helping underprivileged people is positively related to perceived behavioural control.*

## Methods

### Data collection and sample

Following extensive literature survey, appropriate statistical methods were used to examine the effect of exogenous variables on social entrepreneurial intention. In order to select the sample for the research study, we followed the Krueger's (Krueger 1993) suggestion that to accurately measure the entrepreneurial intentions, the sample should be selected from the population of those who are currently facing major career decisions (Krueger 1993). 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 intentions. Beside this, we also followed Hair et al., (Hair 2010) suggestion that five respondents per variable be analysed for the quantitative analysis. Primary data was collected through distributing the questionnaire to the students of one of the premier private universities in India. 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. In the questionnaire, an explanation was prefixed regarding privacy of their response 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. Six hundred questionnaire were distributed to the students out of which we received three hundred ninety completed questionnaires corresponding to a 65% response rate. 69% ( $N = 254$ ) of the respondents were male and 31% ( $N = 120$ ) were female and the average age of the respondents was approximately 20 years.

## Measures

### Social entrepreneurial intention

In the literature of entrepreneurial intentions, there are various scales that measure intentions. For this study 9 item scale was used adopted from Krueger, Reilly, & Carsrud (Krueger et al. 2000) study. The items were measured on a 7-point Likert scale with 1 = strongly disagree and 7 = strongly agree. This scale was developed to measure entrepreneurial intentions, and we modified the scale according to the nature of the study. Sample item like "I am determined to create a social enterprise in the future" was used. When all 9-items were used scale showed a Cronbach's  $\alpha = 0.61$  and also some items showed cross-loadings, therefore, three items' were excluded from the scale and final 6-items scale was used to measure social entrepreneurial intentions with a Cronbach's alpha value of  $\alpha = 0.81$ .

### Independent variable

**7.2.2.1. Attitude toward becoming a social entrepreneur** To measure attitude toward becoming a social entrepreneur authors used scales developed by Ajzen (2002) and



EIQ (Liñán and Chen 2009). Pretest of theses scale reduced the items and final scale comprised of 5-items. A sample item to measure attitude toward becoming social entrepreneur “Becoming a social entrepreneur implies more advantages than disadvantages to me” with Cronbach’s alpha value of  $\alpha = 0.72$ .

**7.2.2.2. Subjective Norms** To measure subjective norms authors used EIQ (Liñán and Chen 2009). EIQ consists of two sets of three items that measured the normative belief and motivation to comply. To measure these two sets were multiplied and divided by three to generate an average score (Rueda et al. 2015). A sample item to measure subjective norms “Please indicate to what extent you care about what you parents think as you decide on whether or not to pursue a career as a social entrepreneur” and Cronbach’s alpha value of  $\alpha = 0.69$ .

**7.2.2.3. Perceived behavioural Control (PBC)** To measure PBC researchers used five items scaled developed by Liñán & Chen, (Liñán and Chen 2009) and modified by Ernst (Ernst 2011). The items were measured on a 7-point Likert scale from 1 = strongly disagree and 7 = strongly agree. A sample item to measure PBC “I can control the creation process of a social enterprise” and Cronbach’s alpha value of  $\alpha = 0.89$ .

**7.2.2.4. Emotional Intelligence (EmIn)** To measure emotional intelligence authors used the short version of 30-item Trait Emotional intelligence questionnaire. Seven points Likert scale was used to measure the items and out of total 30-items 15 items are negatively coated for example “I usually find it difficult to regulate my emotions”. Validity and reliability of this scale in order to predict entrepreneurial intention were tested by (Zampetakis 2011; Zampetakis et al. 2009) A sample item to measure emotional intelligence is “I’m usually able to influence the way other people feel” and Cronbach’s alpha value of  $\alpha = 0.86$ .

**7.2.2.5. Creativity (Cr)** To measure creativity authors used Zhou and George (2001) 12-item scale. Seven points Likert scale was used to measure the items. A sample item to measure creativity is “I come up with creative solutions to problems” and Cronbach’s alpha value of  $\alpha = 0.80$ .

**7.2.2.6. Moral Obligation (MO)** The moral obligation was measured using SEAS scale (social entrepreneurial antecedent scale) developed by Hockerts (Hockerts 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; Hwee Nga and Shamuganathan 2010) were considered while forming this scale. SEAS scale was validating on three different sample (Hockerts 2015). Therefore, to measure moral obligation a four items questionnaire was used. Seven points Likert scale was used to measure the items. A sample item to measure moral obligation is “It is an ethical responsibility to help people less fortunate than ourselves” and Cronbach’s alpha value of  $\alpha = 0.73$ .

## Data analysis

For data analysis, SPSS version 20 is used.

According to the recommendation given by Anderson and Gerbing (Anderson and Gerbing 1988), authors followed two-stage analytical method to test the model. In the first stage, authors 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 the each scale used in the study. Moreover, SEM is also suitable to find out the interrelationship in a proposed model (Hair et al. 2009). Maximum likelihood procedure was used to analysis the data.

To measure the model fit the chi-square ( $\chi^2$ ) value was calculated. The insignificant value of the  $\chi^2$  test signifies good fit model where modest variation among sample population and the fitted covariance matrix (Hu and Bentler 1998). Absolute fit indices used to identify the relationship between a-priori model and sample data, which demonstrates the most superior fit model are the Chi-Squared test, GFI, AGFI, the RMR, and the RMSEA. The comparative fit index (CFI) is most used 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:

- 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.
- The adjusted goodness-of-fit statistic (AGFI): Similar to GFI, values higher than 0.9 indicate a good fit model.
- 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).
- Root mean square error of approximation (RMSEA): RMSEA .08 to 0.10 indicates a mediocre fit and below 0.08 shows a good fit.

## Results

The descriptive analysis was used for data cleaning and interpretation. 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 and Wah 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 but non-normal data of univariate kurtosis <7 and univariate skewness <2 are acceptable (Finney and DiStefano 2006). Univariate skewness of each variable used in this research study was <.942 and univariate kurtosis value <1.269 in absolute values. Hence non-normality of the data set was not a problem for carrying out further analysis.

Descriptive statistics and correlation are shown in Table 2. These statistics showed that hypothesis are temporary supported. ATB( $r = .38, p < .01$ ), Subjective norms( $r = .31, p < .01$ ), perceived behavioural control ( $r = .45, p < .01$ ), emotional intelligence ( $r = .46, p < .01$ ), creativity ( $r = .31, p < .01$ ) and moral obligation ( $r = .32, p < .01$ ) were positively correlated with social entrepreneurial intention.

### Measurement model

Confirmatory factor analysis was conducted on three control variables viz. gender, family business background and stream (Engineering/ Management) and loads on six exogenous constructs (attitude towards becoming a social entrepreneur, subjective norms, perceived behavioural control, emotional intelligence, creativity and moral obligation).

Summary of derived statistics for measurement model is shown in Table 3. The  $\chi^2$  value was calculated and normally insignificant value of  $\chi^2$  considered good for the fit model.  $\chi^2/\text{df}$  was 1.987, ( $\chi^2/\text{df} < 5.0$ ) which is considered acceptable model (Hair et al. 2009). RMSEA value of the measurement model was 0.05 (90% confidence level) and RMR value was 0.04. Derived GFI value were 0.78 and AGFI = 0.81. Comparative fit indices of measurement model was 0.77 and TLI = 0.83. Therefore, it showed that model is moderately fit. Moreover the average variance extracted for each variable was as follows: ATB = 0.773, SN = 0.519, PBC = 0.821, EmIn = 0.668, Cr = 0.633, MO = 0.527, SEI = 0.842. The AVE values showed how much variance an antecedent explained in comparison to the variance explained by measurement error. As suggested by (Fornell and Larcker 1981) AVE value should be above 0.50. In this study, AVE of variables ranges between 0.51 and 0.84 which is considered as the good reliability values of the indicators.

### Structural model

As shown in the proposed model that social entrepreneurial intention is influenced by student's attitude towards becoming a social entrepreneur, subjective norms, perceived behavioural control, emotional intelligence, creativity and moral obligation. To test the hypothesized model author used the sequence of simplified models.

The first model tests the relationship between the theory of planned behaviour viz. attitude toward becoming a social entrepreneur, subjective norms and perceived behavioural control with social entrepreneurial intention. Hypothesis (H1) i.e. attitude toward becoming social entrepreneur showed the positive significant relationship of medium value ( $\beta = .23^{**}$ ,  $p < .01$ ). Subjective norms (H2) highlighted the positive significant relationship of small size ( $\beta = .11^{**}$ ,  $p < .01$ ). The result of subjective norms was similar to previous entrepreneurial intention studies (Engle et al. 2010; Heuer and Liñán 2013;

**Table 2** Descriptive statistics (mean and standard deviation) and correlation of the variables used in the study

| Construct | Means | SD   | ATB    | SN     | PBC    | EmIn   | Cr     | MO     | SEI    |
|-----------|-------|------|--------|--------|--------|--------|--------|--------|--------|
| ATB       | 6.02  | 0.50 | (.710) |        |        |        |        |        |        |
| SN        | 5.67  | 0.52 | .256** | (.718) |        |        |        |        |        |
| PBC       | 6.65  | 0.64 | .538** | 0.146* | (.721) |        |        |        |        |
| EmIn      | 5.11  | 0.45 | .439** | 0.298* | 0.226* | (.749) |        |        |        |
| Cr        | 6.01  | 0.21 | .63**  | -.156* | .433*  | .556*  | (.753) |        |        |
| MO        | 5.19  | 0.49 | -.18** | 0.34** | 0.58** | -.56*  | .439*  | (.834) |        |
| SEI       | 6.27  | 0.59 | .38**  | 0.31** | 0.45** | .46**  | .311** | .321** | (.871) |

ATB Attitude toward becoming social entrepreneur, SN perceived subjective norms, PBC perceived behavioural control, EmIn Emotional Intelligence, Cr Creativity, MO Moral obligation, SEI Social Entrepreneurial intentions

Note: Diagonal values are the square root of AVE between the variables and their items and off-diagonal elements are correlations: \*\* $p < .01$  and \* $p < .001$ . To measure discriminant validity diagonal values should be higher than off-diagonal values in the same row and column

**Table 3** Measurement Model

| S. No   | Model fit |             | Absolute measures |      |      | Incremental fit measures |      | Parsimonious fit Measures |  | RMSEA |
|---------|-----------|-------------|-------------------|------|------|--------------------------|------|---------------------------|--|-------|
|         | $\chi^2$  | $\chi^2/df$ | RMR               | GFI  | AGFI | CFI                      | TLI  | PCFI                      |  |       |
| Model 1 | 393.32    | 1.871       | 0.04              | 0.78 | 0.81 | 0.77                     | 0.83 | 0.067                     |  | 0.055 |

Rueda et al. 2015) where subjective norms showed the weakest relationship with entrepreneurial intention. Perceived behavioural control (H3) disclosed the strongest impact on social entrepreneurial intention ( $\beta = .39^{**}$ ,  $p < .01$ ). Therefore, TPB factors were explained the moderate percentage of social entrepreneurial variance ( $R^2 = .42$ ). Alternative Model 1 showed acceptable fit to the data ( $\chi^2/df = 5.78$ ; RMSEA = 0.049; SRMR = 0.071; NNFI = 0.79; CFI = 0.78; AGFI = 0.81).

Alternative Model 2 was used to test the relationship between emotional intelligence and the attitude toward becoming a social entrepreneur (H4), subjective norms (H4a) and perceived behavioural control (H4b). The emotional showed a statistically significant relationship of medium impact with the attitude toward becoming a social entrepreneur ( $\beta = 0.291^{**}$ ,  $p < 0.01$ ), and perceived behavioural control ( $\beta = 0.27^{**}$ ,  $p < 0.01$ ). Emotional intelligence does not show significant relationship with subjective = ( $\beta = .145$ ,  $p = .479$ ). Hence hypothesis (H4a) rejected. In the previous study of emotional intelligence and entrepreneurial intentions, Zampetakis et al. 2009 measured the effect of emotional intelligence on attitude and did not test its effect on any other variable of TPB. In the previous study of Ernst (Ernst 2011), subjective norms showed less to no relationship with the antecedents used in the study. Medium percentage of variance explained by emotional intelligence and three mediators ( $R^2 = .39$ ). Alternative Model 2 showed acceptable fit to the data ( $\chi^2/df = 10.961$ ; RMSEA = 0.065; SRMR = 0.081; NNFI = 0.85; CFI = 0.84; AGFI = 0.86).

Alternative Model 3 was used to test the relationship between creativity and the attitude toward becoming a social entrepreneur (H5), subjective norms (H5a) and perceived behavioural control (H5b). Creativity showed the statistically significant relationship of medium impact with both the attitude toward becoming a social entrepreneur ( $\beta = 0.24^{**}$ ,  $p < 0.01$ ), and perceived behavioural control ( $\beta = 0.35^{**}$ ,  $p < 0.01$ ) but showed a weak relationship with subjective norms ( $\beta = 0.09$ ,  $p < .01$ ). Medium percentage of variance explained by creativity and three mediators ( $R^2 = .315$ ). Model 3 showed acceptable fit to the data ( $\chi^2/df = 8.65$ ; RMSEA = 0.051; SRMR = 0.084; NNFI = 0.85; CFI = 0.79; AGFI = 0.84).

Alternative Model 4 was used to test the relationship between moral obligation and the attitude toward becoming a social entrepreneur (H6), subjective norms (H6a) and perceived behavioural control (H6b). Moral obligation showed a statistically significant relationship of low impact with the attitude toward becoming a social entrepreneur ( $\beta = 0.14^{**}$ ,  $p < 0.01$ ), and medium value with perceived behavioural control ( $\beta = 0.25^{**}$ ,  $p < 0.01$ ) but showed a weak relationship with subjective norms ( $\beta = .07$ ,  $p < .01$ ). A small percentage of variance explained by moral and three mediators ( $R^2 = .162$ ). Model 3 showed acceptable fit to the data ( $\chi^2/df = 8.34$ ; RMSEA = 0.063; SRMR = 0.073; NNFI = 0.82; CFI = 0.79; AGFI = 0.86).

Summary of hypothesized models is shown in Table 4.

As shown in the above Fig. 3, creativity showed a positive relationship with all the three mediators' viz. the attitude toward becoming a social entrepreneur, subjective norms and perceived behavioural control.

## Discussion

### Antecedents

The objective of this study was to assess the effect of emotional intelligence, creativity and moral obligation on social entrepreneurial attitudes and 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 to increase the credibility and reliability of the results and also allow for better comparisons. Till today there are few empirical studies conducted in the field of social entrepreneurship. The present research study empirically tested indirect links between emotional intelligence, creativity, moral obligation and social entrepreneurial intentions.

The results of the study suggest that emotional intelligence and creativity are important personality antecedents to social entrepreneurial attitude, subjective norms, perceived behavioural control and social entrepreneurial intentions. A strong relationship between emotional intelligence and social entrepreneurial intentions suggests that the capability of evaluating and assessing the emotions of others situation increases the chance of being involved in solving others problems. This implies that some level of emotional intelligence is necessary for satisfactory social functioning. Emotional intelligence also enables a person to respond more efficiently toward their own feelings and to go for socially adaptive behaviour in order to help other.

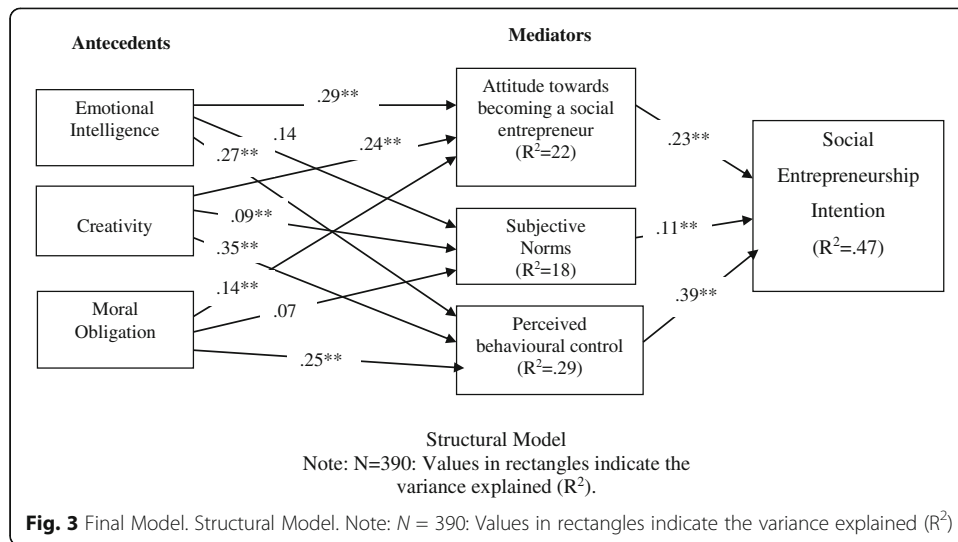
Creativity also showed a strong positive significant relationship with attitude toward becoming a social entrepreneur, subjective norms and perceived behavioural control. The result of this study is similar to the previous research studies in the field of entrepreneurship. Gorman et al. (Gorman et al. 1997), Feldman and Bolino (Feldman and Bolino 2000) and Hamidi et al. (Yar Hamidi et al. 2008) discovered that high creativity scores exert a positive influence on the process of the intention formation. Creativity is one of the most crucial factors in play behind the formation of the entrepreneurial intention. In addition to impacting the intention process, creativity is also supportively related to the preference of an individual of choosing his career with entrepreneurship (Zampetakis et al. 2009; Zampetakis and Moustakis 2006). Creativity is 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.

Moral obligation showed a strong relationship with attitudes toward becoming a social entrepreneur and perceived behavioural control. The desire to help to those in need affects desirability to take this career path. In simple terms, it is suggested that individuals who want to “do good” are looking for those career opportunities which

**Table 4** Goodness-of-Fit Indexes for the Structural Equation Models

| Hypothesized Model | $\chi^2/df$ | RMSEA | SRMR  | NNFI | CFI  | AGFI |
|--------------------|-------------|-------|-------|------|------|------|
| Alt. Model 1       | 5.78        | 0.049 | 0.071 | 0.79 | 0.78 | 0.81 |
| Alt. Model 2       | 10.96       | 0.065 | 0.081 | 0.85 | 0.84 | 0.86 |
| Alt. Model 3       | 8.65        | 0.051 | 0.084 | 0.85 | 0.79 | 0.84 |
| Alt. Model 4       | 8.34        | 0.63  | 0.078 | 0.82 | 0.79 | 0.86 |

Note  $N = 390$ , \*\* $p < .01$



enable them to follow this passion. The strong relationship of moral obligation with social entrepreneurial intentions also suggests that moral obligation is often considered as the trait which a person inherits from his/her upbringing.

### The theory of planned behaviour

The role of the theory of planned behaviour is also validated in this study. According to the Krueger (Krueger 1993), antecedents do not directly affect intention but they affect attitude and which later influence intentions. Therefore in this research study authors used the theory of planned behaviour as the research framework. The result of the theory of planned behaviour is 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 signifies 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 toward 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 also affect the social entrepreneurial intentions. Findings regarding the result of subjective norms are contradictory to the previous study of Ernst (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. 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. 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 conducted in India in the field of social entrepreneurship. This is research study can be proved 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 pave their path.

## Conclusions

Social entrepreneurs are change agents who provide creative and innovative solutions to the most troublesome and intractable issues of the society. They employ ingenious ways to manage venture with a social aim. In this research study, authors tried to find out an indirect effect of personality traits viz. emotional intelligence, creativity and moral obligation on student's intention to opt for social entrepreneurship as their career choice. This research study contributes to the social entrepreneurship literature by testing the effect of emotional intelligence and creativity in order to predict social entrepreneurial intention formation. The finding of this study shows that engineering student's self-perceived creativity is associated with increased levels of social entrepreneurial intent, thus supporting a strong bonding between creativity and social entrepreneurial intentions.

Based on the study findings efforts should be made by policy makers and universities to start such courses that can be helpful in developing emotional intelligence and belongingness among students. 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. Policy makers and educators must develop a sufficient understanding of the precursors for social entrepreneurial intentions for encouraging more and more individuals to get them involved in social entrepreneurship. So the perception of social entrepreneurship might be the key to moving closer towards the understanding of social entrepreneurship generation process. Hence, an inspection of the factors that foster or hinder social entrepreneurship and what are the incentives in action for people to become social entrepreneurs seems reasonable.

## Limitations and future research

The objective of this research study was to provide an approach towards understanding how attitudes toward social entrepreneurship and social entrepreneurial intentions are affected by emotional intelligence, creativity, and moral obligation. However, there are limitations which must be mentioned and issues that are still open for future research. A possible limitation is that this study was confined to the students from a technical university and it may not give the generalised findings for students from the non-technical streams. The proposed model in this research study also offers room for further modification and addition of more antecedents. A longitudinal research study may provide a better understanding related to the intention formation. However, this research study can prove 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 provide answers to the policy makers and academicians.

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## Authors' contributions

PT, AKB and JT were involved in the development of the questionnaire and analysis the data. PT did data collection. All authors were part of manuscript preparation process and approved the final draft of manuscript.



### Competing interests

The authors declare that they have no competing interests.

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