

# To Be or Not to Be a Social Entrepreneur: Motivational Drivers amongst American Business Students

Marieshka Barton, Renata Schaefer, Sergio Canavati

## ABSTRACT

**Objective:** The objective of this article is to investigate the process of motivational needs influencing the intent of potential future social entrepreneurs.

**Research Design & Methods:** California, Bay Area business students were administered a survey combining commercial entrepreneurship models and adding factors of motivation. Two stages of statistical analysis were performed based on the process and content theories of motivation. We used structural equation modelling to validate the model and paired samples t-test analysis to examine the differences between the motives underlying social entrepreneurship intentions.

**Findings:** 202 out of 364 students reported social entrepreneurial intentions. For the process-based motives, perceived feasibility and perceived desirability to start a social enterprise as well as exposure to entrepreneurship are significant predictors of students' intention to form a social enterprise. In addition, perceived feasibility is determined by entrepreneurship education and entrepreneurial self-efficacy, and perceived desirability is determined by students' desire for self-realisation and autonomy. For the content-based motives, the principal-component analysis indicates that students are motivated by the need for achievement and independence.

**Implications & Recommendations:** The findings provide insights into the formation of social entrepreneurial intentions as well practical implications for how to motivate future social entrepreneurs.

**Contribution & Value Added:** The study empirically shows the motives influencing a student's intent to form a social enterprise.

**Article type:** research paper

**Keywords:** social entrepreneurship; motivation; intent formation; social entrepreneurial curriculum; entrepreneurial curriculum

**JEL codes:** C33, F21

Received: 8 October 2017

Revised: 11 February 2018

Accepted: 19 February 2018

## Suggested citation:

Barton, M., Schaefer, R., & Canavati, S. (2018). To Be or Not to Be a Social Entrepreneur: Motivational Drivers amongst American Business Students. *Entrepreneurial Business and Economics Review*, 6(1), 9-35. <https://doi.org/10.15678/EBER.2018.060101>

## INTRODUCTION

Social entrepreneurship constitutes a subfield of entrepreneurship study and practice (Dees, 2001; Certo & Mille, 2008) which spans the boundary between 'non-profits with earned income strategies and for-profits with social mission-driven strategies' (Abu-Saifan, 2012). Social enterprises represent a formidable force to help solve societal ills and achieve a sustainable triple-bottom-line economy (Mair & Marti, 2006; Nicholls, 2011; Weerawardena & Mort, 2006). As Santos (2012) states, 'Social entrepreneurship has profound implications in the economic system: creating new industries, validating new business models, and allocating resources to neglected societal problems.' A founder's application of business strategy used to achieve positive social impact represents a novel field of inquiry for researchers. Research efforts have produced a burgeoning body of literature in an attempt to conceptualise this nascent field (Certo & Miller, 2008; Easter & Conway Dato-on, 2015; Gawell, 2013; Lumpkin, Moss, Gras, Kato, & Amezcua, 2013). Due to the newness of the field, academic contribution has focused on qualitative research in an attempt to define the phenomenon (Dancin, Dancin, & Matear, 2010; Hockerts, 2015; Mair & Marti, 2006; Peredo & McLean, 2006; Short, Moss, & Lumpkin, 2009). However, a lack of consensus remains as to what precisely defines social entrepreneurship (Austin, Stevenson, & Wei-Skillern, 2006; Bacq & Janssen, 2011; Shaw & Carter, 2007; Weerawardena & Mort, 2006).

Given the absence of a definitive theoretical framework unique to social entrepreneurship, Dancin, Dancin and Matear (2010) reaffirm social entrepreneurship as a subfield of commercial entrepreneurship and advocate the use of existing frameworks as the most parsimonious and insightful approach to understanding the field of social entrepreneurship. Furthermore, Hockerts (2015) advocates the need for empirical studies to test and refine theories, despite the lack of a harmonious research construct, as the best means to understand the factors forming a person's social entrepreneurial intention. Understanding the factors impacting social entrepreneurship intention represents an important contribution to the development of social entrepreneurship theory (Mair & Noboa, 2003).

For this research project, we heed the clarion call to use existing theories and empiricism by using motivational theories within the framework of intention models to better understand the motives influencing a student's social entrepreneurship intent formation. Considering the world's state of unmet needs, identifying and motivating potential young social entrepreneurs as founders of businesses for social-wealth creation presents a necessary quest. While a handful of empirical studies have researched students' social entrepreneurship intent formation (Hockerts, 2017; Politis, Ketikidis, Diamantidis, & Lazuras, 2016; Salamzadeh, Azimi, & Kirby, 2013; Tiwari, Bhat, & Tikoria, 2017; Urban & Kujinga, 2017a, 2017b), this study represents the first empirical social entrepreneurship study to use antecedents of intent derived from motivational theories. We use Shapero and Sokol's theoretical entrepreneurial event model, as validated and refined by Krueger (1993), and extend it by including motivational factors as antecedents to attitudes influencing intent, thus building a richer model as encouraged by Krueger (1993) and others. The unique value of this paper consists of looking at motivational drivers through the perspective of process and content theories of motivation. This approach is well established in the field of Organisational Behaviour but not yet enough introduced in the field of Entrepreneurship or sub-

field of Social Entrepreneurship. As stated by Germak and Robinson (2014), social entrepreneurship constitutes a level of motivational complexity over commercial entrepreneurship given social entrepreneurs drive to make a positive social impact while simultaneously sustaining and/or growing the enterprise. Due to the inherent complexity of social entrepreneurship, process and content theories of motivation provide a useful framework to help illuminate the motivating factors (personal needs and values, as well as experience and education) inherent in the decision-making process to become a social entrepreneur. The intended beneficiaries of this public research are students as potential social entrepreneurs in need of curriculum relevant to initiating social enterprises.

After briefly covering the literature on social entrepreneurship, we discuss intention and motivational theories and their applications in the commercial and social entrepreneurial domain. We then present the theoretical underpinnings of our social entrepreneurship motives of intention model. After presenting the results, we discuss their significance and implications that empirically grounded motives of intent might have for social entrepreneurial educators and students.

## LITERATURE REVIEW

### Conceptualising Social Entrepreneurship

Most literature shows that entrepreneurial activities develop under a broad diversity of conditions and include both individual and situational variables (Barba-Sanchez & Atienza-Sahuquillo, 2012; Bird, 1988; Braga, Proenca, & Ferreira, 2015; Krueger & Brazeal, 1994; Shapero & Socol, 1982; Shane, Locke, & Collins, 2003). Some scholars emphasise founder characteristics defining social entrepreneurs as 'restless' change-makers (Germak & Robinson, 2014). Given market disequilibrium, opportunity recognition represents another dominant stream of conceptualising social entrepreneurship activity (Martin & Osberg, 2007). While social entrepreneurs share opportunity recognition abilities similar to that of commercial entrepreneurs (Austin, Stevenson, & Wei-Skillern, 2006), the opportunities inherent in systems of disequilibrium such as providing goods and services within the 'bottom of the pyramid' market strata are vastly different than conventional market opportunities (Dorado, 2006; Robinson, 2006). Social entrepreneurs can disrupt status quo practices as shared by Krige (2015) who states, 'Social entrepreneurship offers a potential shift in society and a unique way of addressing challenges. It focuses on sustainability and accountability using a framework of best practices and matrices of social value and solvency to create opportunities for change.' Other scholars investigate the business process by focussing on iteration and innovation (Dees, 2001). A meta-analysis of the field's most cited literature summarised the dominant threads of definition as 'Social entrepreneurship encompasses the activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by creating new ventures or managing an existing organisation in an innovative manner' (Zahra, Gedajlovic, Neubaum, & Shulman, 2009). Scholars agree social entrepreneurs use sustainable business models to create social wealth and help solve social and environmental challenges (Ayob, Yap, Rashid, Sapuan, & Zabid, 2013) and emphasise its distinguishing feature as social-value creation over capital wealth creation (Germak & Robinson, 2014; Lehner & Germak, 2014; Lumpkin *et al.*, 2013; Mair & Marti,

2006; Miller, Grimes, McMullen, & Vogus, 2012; Visser, 2011). Recognizing that social entrepreneurs seem to embrace colossal social challenges, Germak and Robinson (2014) claim they must be driven by a more complex set of motivations.

### Intention Theories

Motivational factors are inherent in the intentions that influence behaviour and are reliable indicators of one's intensity of effort used to perform a behaviour (Ajzen, 1991). As a result, intentions represent powerful predictors of behaviour, especially in the case of purposive, planned, and goal-oriented behaviour (Bagozzi, Baumgarten, & Yi, 1989). The decision to be an entrepreneur and to create a new business is an involved decision (Wilson, Kickul, & Marlino, 2007) that requires time, planning, and a high degree of cognitive processing. The effort and time involved in starting a business suggests that entrepreneurial actions are clearly intentional; thus, a decision to pursue an entrepreneurial career stems from planned behaviour, which can be explained by intention models.

Several authors have developed intention-based models to explain entrepreneurial intention. Ajzen's (1991) influential theory of planned behaviour (TPB) stems from psychology and has been successfully applied to entrepreneurship to explain and predict an individual's intent to act. TPB suggests that intention to perform a given act precedes the behaviour. Previous models relied too heavily on individual personality traits whereas Ajzen (1991) suggested using an aggregate approach to study behavioural intent. The validated TPB model states that attitudes, social norms, and perceived behavioural control (referred to as the 'antecedents' of intent) indirectly affect behavioural intention and are, therefore, useful in explaining an individual's intent to act (1991). A person will intend to form an enterprise if they have a positive attitude about the opportunity, have social-group support, feel capable and have the resources or access to the needed resources to successfully launch an enterprise. The power to predict an individual's future behaviour based on current preferences proves a powerful tool for both researchers and practitioners. Many researchers have used TPB to study entrepreneurial intention while extending the model to include contextual variables. For example, Wach and Wojciechowski (2016) surveyed Polish university students using Ajzen's theory of planned behaviour, extending it to include an attitude towards risk. They found that an attitude towards entrepreneurship, subjective norms, and perceived behavioural control form entrepreneurial intentions with the concept of risk varying between business and non-business students.

Shapero and Sokol's (1982) theoretical model, the entrepreneurial event model (EEM), pertains specifically to the domain of entrepreneurship. The EEM includes three propositions which indirectly affect intentions: perceived desirability, perceived feasibility, and the propensity to act. Most notably, they proposed perceived desirability and perceived feasibility as significant components in the process of forming a venture indicating that different individuals will have different perceptions of what they find desirable and feasible to accomplish. The EEM suggests that perceptions are more influential on forming intentions than objective facts (Krueger & Brazeal, 1994). Ultimately, the TPB and EEM are similar in their design. The EEM's construct of perceived desirability relates to TPB's constructs of behavioural attitude and social norm, whereas perceived feasibility relates to perceived behavioural control (Krueger, 1993).

Krueger, Reilly and Carsrud's (2000) comparative analysis of the two models confirmed their similarities, as well as their predictive power, yet found TPB to have an  $R^2$  of 0.350 versus the EEM with an  $R^2$  of 0.408. More importantly, Krueger suggested that the EEM might be a better choice for entrepreneurial intention as it more explicitly includes a 'volitional dimension' by gauging an individual's propensity to act. Krueger affirmed that beliefs influence attitudes such as the perception of desirability and feasibility, which then, indirectly, influence intentions. He validated and emphasised perceived feasibility and desirability as important antecedents of intentions (Krueger, 1993; Krueger & Brazeal, 1994; Krueger & Reilly, 2000). Krueger noted that entrepreneurial intentions could result if individuals feel both a positive affection toward entrepreneurship and perceive they are capable of a behaviour that contributes to entrepreneurship. Furthermore, Krueger replaced the proposition 'propensity to act' with the construct 'intention' into Shapero and Sokol's (1982) EEM helping to create a more refined, parsimonious model of intention.

### Social Entrepreneurship Intention

Numerous researchers have used existing intention theories to conduct empirical studies delineating the antecedents to social entrepreneurship intention (SEI) formation. Several studies have applied the theory of planned behaviour (Ayob *et al.*, 2013; Politis *et al.*, 2016; Salamzadeh & Azimi, 2013; Tiwari *et al.*, 2017) and the entrepreneurial event model (Ayob *et al.*, 2013, Hockerts, 2017; Urban & Kujinga, 2016, 2017) to social entrepreneurship intention using a population sample of university students facing career decisions. Research has confirmed the predictive power of perceived desirability and perceived feasibility on social entrepreneurial intent formation (Urban & Kujinga, 2017a). Researchers customise the existing models to address the unique domain of social entrepreneurship given a study's social context. For instance, Tiwari *et al.* (2017) studied university students in India using the TPB model and found that social norms significantly impacted intent formation attributing it to the influence of India's collectivist culture. Whereas Ernst (2011) also used the TPB model to study SEI amongst a German student population but found that social norms did not relate to intention. These findings show the influential power culture has on forming the motives that drive intent and the necessity of designing culturally specific research models as a prerequisite to understanding SEI.

Mair and Noboa (2006) developed the first theoretical model specific to social entrepreneurship intention. They defined SEI as the behavioural intent to start a social enterprise. They used Krueger's (2000) model that synthesised Azjen's TPB and Shapero and Sokol's (1982) EEM to develop a theoretical SEI model. Similar to previous researchers, they put forward perceived desirability and perceived feasibility as the foundational antecedents to social entrepreneurial intention and postulated empathy and moral judgment as antecedents of the perceived desirability and self-efficacy and social support as antecedents of perceived feasibility. Noticeably, the primary difference in their model compared to the theory of planned behaviour and the entrepreneurial event model is located in the perceived desirability construct through the emotional and cognitive antecedents of empathy and moral judgment. The SEI model suggests that social entrepreneurs have different motives driving their desires than commercial entrepreneurs yet face similar factors of feasibility. Forster and Grichnik (2013) validated the SEI model by studying the social entrepreneurial intent formation of corporate volunteers. Their model included empathy and perceived social norms as

antecedents of perceived desirability and self-efficacy and collective efficacy as antecedents of feasibility. Hockerts (2015) also validated Mair and Noboa's (2006) SEI model by testing it with a population of university business students using a Social Entrepreneurship Antecedent Scale instrument. Both Forster and Grichnik (2013) and Hockerts (2015) research showed that the SEI model offered predictive power for perceived desirability and perceived feasibility of social entrepreneurial intent. These studies show a level of commonality between SEI models and findings that correlate an attribute of altruism such as empathy with perceived desirability and correlate an attribute of logistical know how such as self-efficacy with perceived feasibility in determining social entrepreneurial intention.

### **Motivations as Antecedents to Intention**

Motivation plays an important role in creating new organisations (Segal, Borgia, & Schoenfeld, 2005) as it influences the decision-making process that occurs, e.g. motivation's influence on the decision to start a new business creation (Shane *et al.*, 2003). Motives that potential entrepreneurs offer for launching a venture relate to their values, beliefs, attitudes, and needs (Bird, 1988, 1989; Carter, Gartner, Shaver & Gatewood, 2003). It is especially relevant for understanding how motivation influences entrepreneurial behaviour as it influences an individual's direction of action, the intensity of action, and the persistence of action (Shane, Locke, & Collins, 2003; Locke, 2000; Braga, Proenca, & Ferreira, 2014). Motivated individuals are more likely to sustain interest in their goals resulting in higher likeliness of achieving their goals (Robbins & Judge, 2013). Consequently, human motivation theory provides a useful framework for understanding how motivation occurs.

### **Process Theories of Motivation: How Behaviour Occurs**

Process theories of motivation describe the existing behaviour and 'how' behaviour occurs, i.e., how an individual is motivated. Process theory of motivation (PTM) focuses on the intensity of persistence a person dedicates to activities (Segal, Borgia, & Schoenfeld, 2005) and relates motivation to behavioural intention by describing how individuals start, sustain, and stop behaviour (Borkowski, 2009). To better understand the process of entrepreneurial needs, Scheinberg and MacMillan (1988) conducted a factor analysis of the 38 items entrepreneurs reported for starting businesses, which spurred additional research. Most studies in this research stream use reliable multi-item indices and factor-analyses as a statistical technique to derive multiple dimensions describing entrepreneurial motivations (Benzing, Chu, & Kara, 2009; Giacomini *et al.*, 2011; Jayawarna, Rouse, & Kitching, 2011). Research has uncovered five broad reasons for business creation: the need for recognition (authority), the need for financial success (wealth), the need for personal development (self-realisation), the need for independence (autonomy), and the need for developing and implementing one's ideas (challenge).

### **Content Theories of Motivation: Why Behaviour Occurs**

While process theories of motivation describe 'how' behaviour occurs, content theories of motivation describe 'why' behaviour occurs. Content theories of motivation (CTM) study the factors that motivate people to choose a particular alternative (Braga, 2015; Beardwell, Holden, & Claydon, 2004). Consequently, content theories of motivation focus on the needs that motivate people to action, including the needs that energize,

direct, sustain, and stop a person's behaviour. Several authors agree that two distinctive needs or motives define entrepreneurs, the need for achievement and the need for independence (Brockhaus & Horwitz, 1986; Herron & Robinson, 1993; Shaper, 1982). The need for achievement can be a motivating factor in venture creation as many studies show the need for achievement in business success (Segal, Borgia, & Schoenfeld, 2005; Shane *et al.*, 2003; Rokhman & Ahamed, 2015). The need for achievement foretells entrepreneurial behaviour as it stimulates a strong desire to do things well or better than others, including their peers and even those with authority (Hansemark, 1998). People with a high need for achievement tend to plan their actions in advance (Barba-Sanchez & Atienza-Sahuquillo, 2012). They prefer situations where they have direct control over outcomes or where they can observe how their efforts affect the outcomes of an event. Individuals with a high need for achievement also appreciate recognition of their behaviours and achievements (Barba-Sanchez & Atienza-Sahuquillo, 2012; Germack & Robinson, 2014). Germak and Robinson (2014) highlight the need for achievement as a motivation especially relevant to social entrepreneurs given the enormity of social wrongs they seek to solve.

The need for independence is also considered a success factor in entrepreneurship. Some individuals pursue entrepreneurial careers because they have a pronounced need for independence (Shane *et al.*, 2003). Independence entails taking the responsibility to use one's own judgment as opposed to following the assertions of others blindly. It also involves taking responsibility for one's rather than living off the efforts of others. First, the entrepreneur takes responsibility for pursuing an opportunity that did not exist before. Second, the entrepreneur assumes responsibility for the level of a venture's success. Third, the entrepreneur must decide to start, sustain, or stop entrepreneurial activities requiring a high-level of personal judgment.

### Motivation in the Context of Social Entrepreneurship

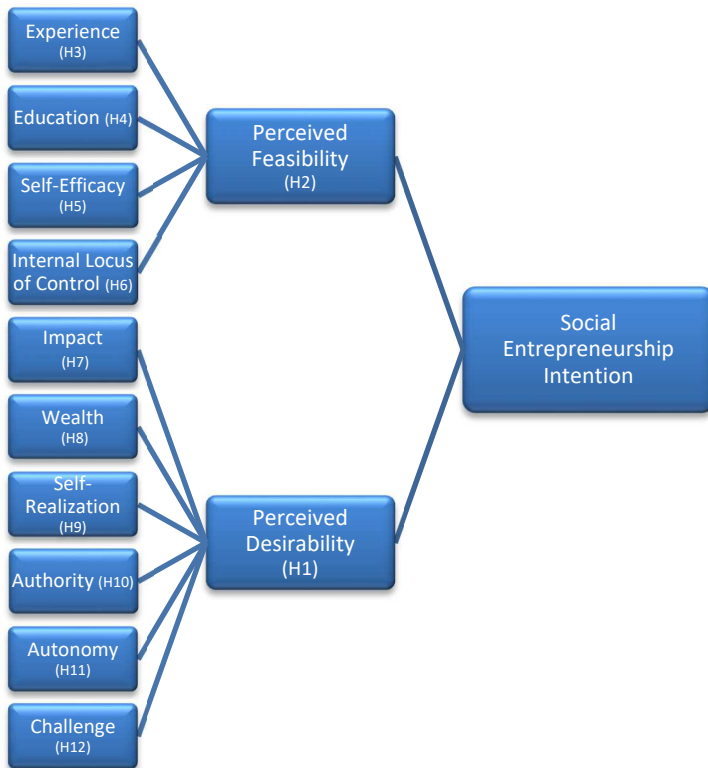
Some scholars have used qualitative methods (Braga *et al.*, 2014; Germak & Robinson, 2014) to understand social entrepreneurial motivations based on human motivation theories, yet there remains significantly less empirical knowledge to understand the motivational drives within the social entrepreneurship literature. As stated in the literature review, researchers agree that social entrepreneurs are motivated by their desire to have a social impact and to solve social problems (Alvord, Brown, & Letts, 2004; Shaw & Carter, 2007; Zahra & Dess, 2001) and are presumably driven by a more complex set of motives than commercial entrepreneurs in their goals to achieve financial sustainability, programme scalability, and, most importantly, social impact (Germak & Robinson, 2014). The aim of this article is to provide a deeper understanding of the motivational factors influencing the behaviours of potential future social-entrepreneurs in order to identify their entrepreneurial profiles. Therefore, we formulate the following key research questions:

- RQ1:** How is an individual's intention toward social entrepreneurship initiated and sustained? What role do perceived desirability and perceived feasibility play into the entrepreneurial process? What motives significantly affect perceptions of social enterprise desirability and feasibility and thus form behavioural intentions?
- RQ2:** Once students consider starting a social enterprise, what motivational factor energises them most? What type of motives are they attempting to satisfy?

## HYPOTHESIS

### Social Entrepreneurial Motivations of Intention

Our model is based on the work of Krueger (1993) and Krueger, Reilly and Carsrud (2000) who synthesized and refined Ajzen's (1991) TPB and Shapero and Sokol's (1982) EEM. As indicated, process-based motivation theories help illuminate how specific behaviour starts and what individual- and situation-based factors influence the process. Therefore, we use the theory of process motivation to develop the antecedents of social entrepreneurship intention, which are mediated through a student's perceived desirability and perceived feasibility (Figure 1).



**Figure 1. Process-based motivational intention model to create a social enterprise**

Source: adopted theoretical factors of motivation from the psychological and entrepreneurship literature.

### Perceived Desirability, Perceived Feasibility, and Social Entrepreneurship Intention

We operationalise SEI as the intent to start a social enterprise (Chen, Green, & Crick, 1998; Mair & Noboa, 2006). To address the first research question, we focus on the intention formation of the entrepreneurial process. In particular, we propose a model of how behavioural intentions to create a social enterprise form through Krueger's (1993) variables 'perceived desirability' and 'perceived feasibility' as research shows perceived desirability and perceived feasibility to be the strongest predictors of intent (Forster & Grichnik, 2013). The term 'perceived desirability' relates to how appealing



it is to an individual to generate an entrepreneurial event such as starting a social enterprise. The term “perceived feasibility” relates the extent to which an individual believes they have the capability to start a new venture. Based on the above arguments, we formulate the following hypotheses:

- H1:** A positive relationship exists between perceived desirability and the intention to establish a social enterprise.
- H2:** A positive relationship exists between perceived feasibility and the intention to establish a social enterprise.

### **Entrepreneurial Experience and Social Entrepreneurship Intention**

Shapiro and Sokol (1982) and Krueger (1993) emphasized that prior knowledge in the form of experience and education are significant predictors of entrepreneurial intention. An individual’s experiences, such as volunteering, help form their motivations and attitudes toward entrepreneurship (Braga, 2015), which may also trigger the entrepreneurial process (Ajzen, 1991; Krueger, Reilly, & Carsrud, 2000; Souitaris, Zerbini, & Al-Laham, 2007). As with perceived desirability and perceived feasibility, research suggests that experience has a direct relationship with intention versus antecedents which are moderated through one’s perceptions. Based on the above arguments, we formulate the following hypotheses:

- H3:** A positive relationship exists between entrepreneurial experience and the intention to establish a social enterprise.

### **Antecedents of Perceived Feasibility**

Situational factors also influence entrepreneurial intentions (Ajzen, 1987; Boyd & Vozikis, 1994; Tubbs & Ekeberg, 1991). Based on the evidence in the field of social entrepreneurship and existing literature, we analyse three important antecedents stemming from situational factors. We propose that perceived feasibility is affected by 1) entrepreneurial education 2) an ability to perform a specific behaviour required for starting a social enterprise (self-efficacy), and 3) a belief that actions or personal characteristics affect outcomes over which they have direct control (internal locus of control). These three antecedents influence the perception of feasibility and therefore indirectly affect one’s entrepreneurial intention.

### **Entrepreneurial Education as an Antecedent to Perceptions of Feasibility**

Noel (2002) showed that a direct relationship exists between entrepreneurial education and entrepreneurship as a career choice. Similarly, Wilson, Kickul and Marlino (2007) argued that entrepreneurship education increases interest in entrepreneurship as a career choice. Entrepreneurship education can spur business start-ups through changing students’ mind-set and raising their entrepreneurial orientation (Fayolle, Gailly, & Lassas-Clerc, 2006). Based on the above arguments, we formulate the following hypotheses:

- H4:** A positive relationship exists between entrepreneurial education and the perceived feasibility of establishing a social enterprise.

### **Entrepreneurial Self-efficacy as an Antecedent of Perceived Feasibility**

The term ‘self-efficacy’ refers to the extent to which people believe they have the capabilities to positively affect desired outcomes. Bandura (1982) suggests that self-

efficacy is ‘concerned with judgments of how well one can execute courses of action required to deal with prospective situations.’ In the entrepreneurship literature, self-efficacy has developed into the concept of entrepreneurial self-efficacy (ESE), which describes the extent to which an individual believes he or she can start an entrepreneurial venture (Chen, Green, & Crick, 1998). In the context of social entrepreneurship, individuals with greater self-efficacy are more inclined to create a social enterprise because they believe they can do so (Mair & Noboa, 2006). Based on the above arguments, we formulate the following hypothesis:

- H5:** A positive relationship exists between entrepreneurial self-efficacy and perceived feasibility of establishing a social enterprise.

### **Internal Locus of Control as an Antecedent of Perceived Feasibility**

Many studies highlight the need for an internal locus of control in business success (Segal, Borgia, & Schoenfeld, 2005; Shane *et al.*, 2003; Rokhman & Ahamed, 2015). Locus of control describes a person’s belief that his or her actions, rather than random elements such as luck or chance, lead to outcomes. Essentially, people attribute the reason for an occurrence either to themselves or to the external environment. Those who experience having control over occurrences have an internal locus of control (Rotter, 1996). Based on the work of Mueller and Thomas (2001) and Rotter (1996), individuals with an internal locus of control would be likely to seek entrepreneurial roles because they desire positions in which their actions have a direct impact on results. Based on the above arguments, we formulate the following hypothesis:

- H6:** A positive relationship exists between internal locus of control and perceived feasibility of establishing a social enterprise.

### **Antecedents of Perceived Desirability**

As stated previously, the term ‘perceived desirability’ relates to how appealing it is to an individual to generate an entrepreneurial event such as starting a venture. The level of perceived desirability varies based on individual characteristics and is affected by person’s values, needs, and attitudes. We propose that there is a positive relationship between students’ entrepreneurial motives and the intention to start a social enterprise. We, therefore, wanted to discover students’ primary motives and how motives help form social entrepreneurship intention.

### **The Need to Make an Impact (Impact Objective) as an Antecedent to Perceptions of Desirability**

Competency, choice, and meaningfulness are key elements determining motivation amongst youths (Hertzberg, 1987). Studies show Millennials inspire to do well by doing good. As Buchanon (2010) found about Millennials, ‘Almost 70 percent say that giving back and being civically engaged are their highest priorities.’ Young adults want to get involved in finding solutions to complex issues that require creative problem-solving. Based on the above arguments, we formulate the following hypothesis:

- H7:** A positive relationship exists between the desire to make an impact and the perceived desirability of establishing a social enterprise.

### **The Need for Financial Success (Wealth Objective) as an Antecedent to Perceptions of Desirability**

The wealth objective for business creation captures the importance of financial returns from entrepreneurship and emphasizes the desire for wealth and financial sustainability. As noted by Boschee (1995), social entrepreneurs tend to successfully balance both the 'moral imperatives and the profit motive.' Financial success not only relates to solvency but also to the means of scaling social-mission impact. Based on the above, we formulate the following hypothesis:

**H8:** A positive relationship exists between the need for financial success and the perceived desirability of establishing a social enterprise.

### **The Need for Personal Development (Self-realisation Objective) as an Antecedent to Perceptions of Desirability**

This dimension captures the desire for personal development through entrepreneurship. It includes aspects such as having meaningful work, responsibility, fulfilling one's personal vision. Germak's (2013) quantitative study of newly formed social enterprises found a significant relationship between being a nascent social entrepreneur and personal fulfilment highlighting self-realisation as a possible motive for SEI. Based on the above, we formulate the following hypothesis:

**H9:** A positive relationship exists between the need for self-realisation and the perceived desirability of establishing a social enterprise.

### **The Need for Recognition (Authority Objective) as an Antecedent to Perceptions of Desirability**

This reason for business creation captures aspects related to social status, such as the desire to receive recognition and respect from friends, family and the wider community for one's work as an entrepreneur. Previous researchers have operationalised recognition through the following three items: 'to achieve a higher position for myself in society,' 'to be respected by my friends,' and 'to achieve something and get recognition for it' (Carter *et al.*, 2003). Based on the above, we formulate the following hypothesis:

**H10:** A positive relationship exists between the need for authority and the perceived desirability of establishing a social enterprise.

### **The Need for Ndependence (Autonomy Objective) as an Antecedent to Perceptions of Desirability**

This dimension highlights the entrepreneurial motivation to control one's work life including control over one's own time and work, making independent decisions, and having the flexibility to combine work with one's personal life. Control of one's work leads to greater levels of engagement and creativity (Deci & Ryan, 2012). Based on the above, we formulate the following hypothesis:

**H11:** A positive relationship exists between the need for autonomy and the perceived desirability of establishing a social enterprise.

### **The Need for Winning; Developing and Implementing Own Ideas (Challenge Objective) as an Antecedent to Perceptions of Desirability**

This dimension captures a desire for learning through the challenge of creating and effectively running a business. Challenge also relates to goal setting and the intrinsic motivation to meet important milestones (Germak & Robinson, 2014; Naffziger, Hornsby, & Kuratko, 1994). Based on the above arguments, we formulate the following hypothesis:

- H12:** A positive relationship exists between the need for challenge and the perceived desirability of establishing a social enterprise.

## **MATERIAL AND METHODS**

We surveyed undergraduate business students at a California, Bay Area public university in the US. As stated by Krueger (1993), students represent an ideal sample population as they are 'currently facing actual major career decisions' and are devoid of hindsight biases. Students also represent a relatively homogenous sample due to their similar age range and levels of education and work experience. We used the Entrepreneurial Intention Questionnaire (EIQ) (Liñán, 2005) with settings of variables in the survey developed by Wach's 2015 Entrepreneurial Intentions Questionnaire (Wach & Wojciechowski, 2016). The resulting sample size totalled 364 survey responses. Research suggests that using entrepreneurial orientation scales are appropriate for social mission-driven entrepreneurs, but they need to be modified to include the situational context and subject of study variables (Kusa, 2016). Thus, we amended our scale to include questions on social entrepreneurship intention and motivation. Students were awarded points for participation and emailed the online questionnaire. Data collection occurred once in the Fall 2016 semester and once in the Spring 2017 semester.

We performed our analysis in two stages. The first stage was based on the model using process theory of motivation variables shown in Figure 2. This stage addressed the first research question:

- RQ1:** How is an individual's intention toward social entrepreneurship initiated and sustained? What role do perceived desirability and perceived feasibility play in the entrepreneurial process? And what factors significantly affect perceptions of social enterprise desirability and feasibility and thus form behavioural intentions?

Social entrepreneurship intention represented the dependent variable. Drawing from Krueger's (1993) model which measured intention as a dichotomous variable using the item 'Do you think you will ever start a business?', we also treated the intention construct as a dichotomous variable asking students, 'Would you consider becoming a social entrepreneur?' The variable was set equal to 1 if the respondent considered creating a social enterprise at the time of the survey and 0 if otherwise. Using a dichotomous variable to measure social entrepreneurial intention best captured a respondent's intent to form a social enterprise as a yes/no question helps eliminate vacillation and abstraction. It also helped to stratify respondents into the two levels (yes/ no) versus a scaled rating which could have potentially produced multiple levels of responses and or erroneously skewed the data to the anchors or middle. To account for the fact that the dependent variable in our model is a dichotomous

variable, we fitted a model for social entrepreneurship intentions using path analysis and used a generalised structural equation model with a probit distribution for the dependent variable. See Table 1 below for a summary of the PTM section of the instrument.

**Table 1. Process-based motivational variables**

Independent Variable	Method of Measurement	Survey Item(s)
Perceived Desirability (H1)	Kruger's (1993) model for measuring perceived desirability	<ul style="list-style-type: none"> <li>- How much would you like it?</li> <li>- How enthusiastic would you be?</li> <li>- How stressed out would you be? (reverse coded)</li> </ul>
Perceived feasibility (H2)	Kruger's (1993) model for measuring perceived feasibility Cronbach's alpha = 0.678	<ul style="list-style-type: none"> <li>- How hard do you think it would be? (reverse coded)</li> <li>- How busy do you believe you would be? (reverse coded)</li> </ul>
Entrepreneurship experience (H3)	Measured using a dichotomous variable equal to 1 if the student had ever been self-employed and 0 otherwise as suggested by Kruger's (1993) model	<ul style="list-style-type: none"> <li>- Have you ever been self-employed?</li> <li>- Have you ever tried to start your own business?</li> </ul>
Entrepreneurship education (H4)	Used Wach and Wojciechowski (2016) EIQ as well as research findings of Lee, Chang, and Lim, (2005) and De Jorge-Moreno, Castillo, and Triguero (2012) Cronbach's alpha = 0.899	<ul style="list-style-type: none"> <li>- I have participated in any academic course on a module on entrepreneurship and I acquired the basic knowledge.</li> <li>- I have participated in any entrepreneurial workshops, creativity labs, interpersonal trainings and I acquired the basic skills.</li> <li>- I often participate in guest lectures and speeches of businessmen, entrepreneurs, and economic policy-makers, which are organised at the campus and off-the-campus by business practitioners.</li> <li>- I have good working knowledge about the business environment, the economy as well as financial institutions and markets.</li> <li>- I have good working knowledge about entrepreneurial mechanisms and processes required in everyday business.</li> <li>- I have good working managerial skills, capabilities and competencies required for a good manager.</li> <li>- I have necessary abilities to be an entrepreneur. I have the skills and capabilities required to succeed as an entrepreneur.</li> </ul>

Independent Variable	Method of Measurement	Survey Item(s)
Entrepreneurial self-efficacy (ESE) (H5)	We adopted the approach used by Chen, Green, and Crick (1998); Liñán and Chen (2009); and Wach and Wojciechowski (2016) to measure entrepreneurial self-efficacy. Students were asked to express their agreement or disagreement to the corresponding survey items using a 7-point Likert scale.  Cronbach's alpha = 0.922	If I had my own business right now, in general, I am able to: - set and meet market share goals, - establish positioning in the market, - expand business. Innovation ESE - engage in new venturing and new ideas, - engage in new markets/products/technologies. Financial ESE - perform financial analysis, - develop financial systems and internal controls.
Locus of control (H6)	Based on the concept developed by Rotter (1996) and Mueller and Thomas' (2001) and Wach and Wojciechowski (2016) EIQ, students were asked to express their agreement or disagreement to the corresponding survey items using a 7-point Likert scale.	- When I make plans, I am almost certain to make them work. - Saving and careful investing is a key factor in becoming rich. - Becoming rich has little or nothing to do with chance. - Financial security is largely a matter of good fortune (reverse coded).
Desire to make an impact (H7)	Students were asked to express the importance of five broad reasons for choosing an entrepreneurial career using a 7-point Likert scale	Please indicate the importance of the variable 'to make an impact' in determining why would you consider becoming an entrepreneur.
Five broad reasons for business creation: - Wealth objective (H8) - Self-realisation objective (H9) - Authority objective (H10) - Autonomy objective (H11) - Challenge objective (H12)	Based on the studies by Benzing, Chu, and Kara (2009), Jayawarna, Rouse, and Kitching (2011), Giacomini <i>et al.</i> (2011), and Wach and Wojciechowski (2016) students were asked to rate the importance of the five broad reasons for choosing an entrepreneurial career using a 7-point Likert scale.	Being an entrepreneur will (would) enable me to: - obtain income to live on or to reach a higher level of income (wealth), - carry out the kind of job I really like (self-realisation), - achieve great social recognition and professional prestige (authority) - be independent as my own boss (autonomy), - put my own ideas into practice, compete with others (challenge).

Source: adopted theoretical models from the motivational literature.

Students completed the entire survey; however, the second stage of analysis was only performed on surveys where students stated they would consider becoming a social entrepreneur. In the second stage, we explored the dominant motivational reasons for starting a social enterprise once the intention to establish a social entrepreneurship exists. This approach aligns with content theories of motivation attempt to understand 'why' behaviour occurs and addresses the second research question:

**RQ2:** Once students consider starting a social enterprise, what motivational factors energize them most? What type of individual needs are they attempting to satisfy?

We wanted to analyse the influence of motives on students' social entrepreneurial behaviour and determine the most influential motivational factors. Following the methods of Barba-Sanchez and Ateienza-Sahuquillo (2012) and the Royal Bank of Canada's (2014) 'Meaningful business: Understanding social entrepreneurs' white paper, we divided 11 items into two main constructs linking them to the need-based theories of motivation as developed by content motivational theorists. The motivational constructs related to starting a social enterprise include personal and social achievement and professional independence. The personal and social achievement motivation for starting a social enterprise relates to the desire to contribute to the welfare of the community as well as adhering to ethical values and desiring to be creative and do something meaningful. The professional independence motivation for starting social enterprise relates to the desire to achieve professional admiration from others. See Table 2 below for a summary of the CTM section of the instrument. For the content theories of motivation, we used a paired samples t-test to analyse differences in mean scores for each motivation for social entrepreneurship.

**Table 2. Content-based motivational variable definitions**

Independent Variable	Method of Measurement	Survey Item(s)
Personal and Social Achievement motivation to start a social enterprise	Measured through a composite score of four survey items: 1, 2, 3, 4, 8, 10 and 11. Students chose the importance of each item in a 7 Likert scale with not important = 1 and very important = 7.  Cronbach's alpha = 0.903	<ul style="list-style-type: none"> <li>- Making the world a better place.</li> <li>- Improving the community that I live in.</li> <li>- Creating a positive environment for employees.</li> <li>- Meeting important social/environmental needs in the community.</li> <li>- Personal fulfilment.</li> <li>- Ethical motives and moral responsibility</li> <li>- Doing something meaningful / creating a new value.</li> </ul>
Professional Independence Motivation to start a social enterprise	Measured through a composite score of four survey items: 5, 6, 7, and 9. Students chose the importance of each item in a 7 Likert scale with not important = 1 and very important = 7.  Cronbach's alpha = 0.890	<ul style="list-style-type: none"> <li>- Building a good reputation for my company in the community.</li> <li>- Because it's important for today's consumers.</li> <li>- Helping differentiate my company in a unique way.</li> <li>- Positioning my company as eco-friendly.</li> </ul>

Source: adopted theoretical models from the motivational literature.

## RESULTS AND DISCUSSION

The demographic characteristics of our sample (N = 364) follow: 45% of respondents were male and 55% were female; over 90% of respondents were between the ages of 20 to 25 years old. Over 90% of the respondents had completed between three to five years of college, and 202 respondents, nearly 55.5% indicated they would consider becoming a social entrepreneur.

### Process Theories of Motivation

The first three hypotheses (perceived desirability, perceived feasibility, and entrepreneurial experience) were predicted to directly influence social entrepreneurship intention. H1 predicted a positive relationship between perceived desirability and social entrepreneurship intention. The results show there is a positive and significant correlation between perceived desirability and social entrepreneurship intention (p.e. = 0.32;  $p = 0.00$ ). H2 predicted a positive relationship between perceived feasibility and social entrepreneurship intention. The results show that perceived feasibility is a positive and significant predictor of social entrepreneurship intention (p.e. = 0.36;  $p = 0.00$ ). H3 predicted a positive relationship between entrepreneurial experience and social entrepreneurship intention. The results show that the relationship between entrepreneurship experience and social entrepreneurship intention is positive and significant (p.e. = 0.33;  $p = 0.07$ ). Thus, we find support for H1, H2, and H3. (Figure 2 and Table 3).

The results of the process-based antecedents of perceived feasibility of social entrepreneurship intention follow: H4 predicted a positive relationship between entrepreneurship education and perceived feasibility. The results show a positive and significant correlation between entrepreneurship education and perceived feasibility (p.e. = 0.24;  $p = 0.00$ ). H5 predicted a positive relationship between entrepreneurial self-efficacy and perceived feasibility. The results show a positive and significant correlation between entrepreneurial self-efficacy and perceived feasibility (p.e. = 0.11;  $p = 0.10$ ). H6 predicted a positive relationship between internal locus of control and perceived feasibility. The results show a positive and significant correlation between internal locus of control and perceived feasibility (p.e. = 0.26;  $p = 0.00$ ). Thus, we find support for H4, H5, and H6.

The results of the process-based antecedents of perceived desirability of social entrepreneurship follow: H7 predicted a positive relationship between a student's desire to make an impact and perceived desirability. The results show a positive and significant correlation between a student's motivation to make an impact and perceived desirability (p.e. = 0.08;  $p = 0.03$ ). H8 predicted a positive relationship between the wealth objective and perceived desirability. Results show a negative and insignificant correlation between the wealth objective and perceived desirability (p.e. = -0.05;  $p = 0.3$ ). H9 predicted a positive relationship between self-realisation and perceived desirability. The results show a positive and significant correlation between self-realisation and perceived desirability (p.e. = 0.21;  $p = 0.07$ ). H10 predicted a positive relationship between a student's autonomy objective and perceived desirability. The results show a negative and insignificant correlation between authority and perceived desirability (p.e. = -0.06;  $p = 0.23$ ). H11 predicted a positive relationship between a student's autonomy objective and perceived desirability. The results show a positive and significant correlation between autonomy and perceived desirability (p.e. = 0.15;  $p = 0.01$ ). H12 predicted a positive relationship between a student's challenge objective and perceived desirability. The results show an insignificant effect between challenge and perceived desirability. Thus, we find support for H7, H9, and H11, while we fail to find support for H8, H10, and H12. (Figure 2 and Table 3).



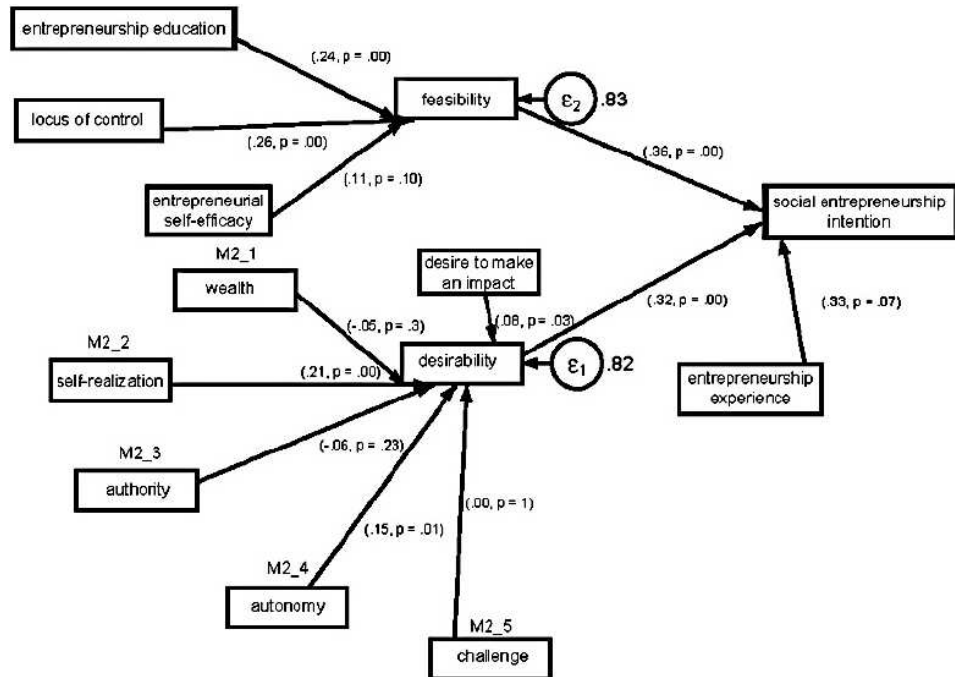


Figure 2. Outcomes of the process-based motivational intention model to create a social enterprise based on perceived desirability and feasibility

Source: own calculations based in STATA.

Table 3. Summary of results of path analysis for process-based motivations

Results of Path Analysis	Parameter Estimate (p.e.)
Perceived Desirability -> SEI (H1)	0.32***
Perceived Feasibility -> SEI (H2)	0.36***
Entrepreneurship Experience -> SEI (H3)	0.33***
Entrepreneurship Education -> Perceived Feasibility (H4)	0.24***
Entrepreneurial Self-Efficacy -> Perceived Feasibility (H5)	0.26***
Locus of Control -> Perceived Feasibility (H6)	0.11+
Desire to Make an Impact -> Perceived Desirability (H7)	0.08*
Wealth Objective -> Perceived Desirability (H8)	-0.05
Self-Realisation Objective -> Perceived Desirability (H9)	0.21***
Authority Objective -> Perceived Desirability (H10)	-0.06
Autonomy Objective -> Perceived Desirability (H11)	0.15**
Challenge Objective -> Perceived Desirability (H12)	0.00

\*\*\* p-value < 0.001; \*\* p-value < 0.01; \* p-value < 0.05; + p-value < 0.10

Source: own calculations in STATA.

The results confirm the applicability of commercial entrepreneurial models to the social entrepreneurial domain in determining behavioural intention as both perceived feasibility and perceived desirability displayed statistically highly significant

results. As noted by Krueger and Brazeal (1994), perceived feasibility has influential primacy over intention; likewise, perceived feasibility shows higher results over perceived desirability in this study. Perceived feasibility also appears to be the more stable construct between the fields of commercial and social entrepreneurship as antecedents of entrepreneurial education, entrepreneurial self-efficacy, and internal locus of control tend to be used in most models with results showing positive and significant correlation. As Mair and Noboa's (2003) SEI model suggests, social entrepreneurs (or in our study's case) pre-social entrepreneurs face perceived feasibility needs similar to commercial entrepreneurs yet are driven by a different suite of perceived desires. Our model suggests that students are motivated most by a quest for self-realisation followed by autonomy and a desire to make an impact. Based on the cultural context of our study, situated in the economically and entrepreneurially robust Bay Area, CA, we hypothesised that students would be motivated by a wealth and authority objective, but, these objectives had a negative (yet insignificant) relationship to the perceived desirability of social entrepreneurship.

### Content Theories of Motivation

The second stage of the study analysed the surveys of students who stated they would consider becoming a social entrepreneur ( $n = 202$ ). The mean values and standard deviation for items that composed the motivational constructs of personal and social achievement and professional independence are shown in Table 4.

**Table 4. Mean and standard deviation of the 11 content-based motivational needs**

No.	Item	Mean	Std. Dev.
1.	Personal fulfilment	5.653	1.103
2.	Ethical motives and moral responsibility	5.541	1.095
3.	Making the world a better place	6.034	1.099
4.	Improving the community that I live in	5.736	0.994
5.	Building a good reputation for my company in the community	5.756	1.212
6.	Because it's important for today's consumers	5.578	1.392
7.	Helping differentiate my company in a unique way	5.848	1.205
8.	Creating a positive environment for employees	5.960	1.051
9.	Positioning my company as eco-friendly	5.573	1.186
10.	Meeting important social/ environmental needs in the community	5.760	1.078
11.	Doing something meaningful / creating a new value	5.790	1.089

Source: own calculations in STATA.

To analyse the influence of these motives on students' social entrepreneurial behaviour and determine the most influential motivational factors, we performed a principal component analysis on the 11 questions adopted from the Royal Bank of Canada's (2014) white paper. The results of this analysis are reported in Table 5.

Only two factor components with eigenvalues above 1 were extracted. These two components explain 70% of the variance. Values for the Kaiser-Meyer-Olkin (KMO) test for sampling adequacy were 0.868 and Bartlett's Test of Sphericity was statistically significant ( $\chi^2 = 1,664$ ;  $p \leq 0.001$ ).

**Table 5. Principal-component analysis (varimax rotation) factor loadings for content-based motivations**

Item	Personal and Social Achievement	Professional Independence
1.	0.663	
2.	0.813	
3.	0.553	
4.	0.834	
5.		0.739
6.		0.891
7.		0.917
8.	0.591	
9.		0.672
10.	0.698	
11.	0.880	

Source: own calculations in STATA.

In the literature review, we identified two main sources of motivation for entrepreneurs: the need for achievement and the need for independence. As shown by Germak and Robinson (2014), social entrepreneurs tend to need achievement as a motivating factor in order to address and overcome the severity of social ills. Likewise, the need for professional independence would seem an inherent attribute of social entrepreneurs venturing to disrupt the status quo of market disequilibrium. Two other studies perform principal component analyses of the needs driving entrepreneurial motivation. Stefanovic, Prokic and Ranković (2010) identify business achievement and independence as the two main needs motivating entrepreneurship while Barba-Sanchez and Atienza-Sahuquillo (2012) identify the need for success and self-realisation (which can be categorised as the need for achievement) as well as the need for professional autonomy as the primary needs motivating entrepreneurship. Autio, Keeley, Klofsten and Ulfstedt's (1997) study of entrepreneurial intention also confirmed the need for achievement and autonomy as important influencers for students. In line with our synthesis of the literature on content-based motivations for becoming a social entrepreneur, the two motivational needs which emerge in our principal component analysis can be classified as the need for achievement and the need for independence. When starting a social-mission enterprise, entrepreneurs are driven by:

1. *Social and Personal Achievement motivation* for starting a social enterprise is understood as a desire to use their personal capabilities to achieve social change and contribute to the welfare of the community;
2. *Professional Independence Motivation* for using a business model focus on social issues which can give them a competitive advantage over other entrepreneurs as well as established businesses.

## CONCLUSIONS

This study aimed to investigate the predictors of social entrepreneurial intentions as well as the main motivational drivers among business students at a California, Bay Area public uni-versity in the US. The theoretical foundation was based on Ajzen's (1991) TPB and

Shapero and Socol's (1982) EEM with additional material by Krueger (1993) and Krueger, Reilly and Carsrud (2000). Our model complements existing models by further confirming the robustness of the TPB and EEM as applied to social entrepreneurship as well as confirming entrepreneurial experience (Ayob *et al.*, 2013; Ernst, 2011; Hockerts, 2017), entrepreneurial education (Ayob *et al.*, 2013; Politis *et al.*, 2016), and entrepreneurial self-efficacy (Urban & Kujinga, 2017) as important antecedents to social entrepreneurial intention. We extended the existing literature by adding contextually appropriate antecedents of motivation with results showing self-realisation and autonomy as significant process-based motivators to SEI in the Northern Californian context. We also show that the need for achievement and the need for independence relates to social entrepreneurial intention formation just as it does with its commercial counterpart.

### **Implications and Recommendations for Practice**

Findings surfaced that are important for both social entrepreneurship literature and universities. A meta-analysis empirically shows that intentions predict behaviour but also that motives informed by attitudes, beliefs, personality traits, and habits predict intentions (Kim & Hunter, 1993). This empirical study has added to the social entrepreneurship intention theory by testing motives derived from human motivational theory as antecedents to the perceptions of intent with findings contributing self-realisation and autonomy as important motives driving SEI.

The findings allow both researchers and educators to identify determinants of social entrepreneurial intention and motivational factors among business students who will one day become social business leaders and are expected to contribute effectively to sustainable economic and social development. It is important to understand students' motivations when designing entrepreneurial programmes that best cater to students' needs and expectations. Likewise, it is necessary to effectively communicate the advantages of being a social entrepreneur. Our findings suggest that universities would best deliver their social entrepreneurship goals by focussing on activities that cultivate the feasibility perception and desirability perception among students in order to promote more social entrepreneurial start-ups. Findings also show that it is important to expose students to the feasibility of social enterprises through different initiatives. The instrument's very practical feasibility items suggest that confidence in managerial capabilities relates to forming social entrepreneurial intention and should be instructive to educators to provide practical, experiential student learning opportunities such as service-learning projects in partnership with need-based programmes. While perceived feasibility can be addressed by building traditional managerial-skill sets through hands-on experience, perceived desirability appears more subjective and relative to the cultural context. For our study, students' social entrepreneurial intent formation was motivated most by the need for self-realisation and autonomy, which coincides with the content-theory of motivation results showing independence as a motivating factor. The need for independence as well as the need for achievement could be nurtured through business university-incubator labs inclusive of social mission ventures. These practical recommendations could be a promising approach since both Millennial and Generation Z students want to make a difference and make an impact to 'do well by doing good.'

### Research Limitations and Suggestions for Future Research

The findings are limited to students attending a university business department in Northern California's Bay Area. Intention formation has shown to be context dependent (Busenitz, Gomez, & Spencer, 2000; Robinson, 2006), and our study is uniquely situated in an area renowned for having a robust entrepreneurial culture and start-up ecosystem. The research findings may not represent the whole population of undergraduate students in the US. A cross-section of US business students might achieve a more general characterisation of US students' social entrepreneurial intention formation. While we held close allegiance to Krueger's model and instrument which used 'Do you think you will ever start a business?' as a dichotomous variable compared to our model's use of 'Would you consider becoming a social entrepreneur?', it is possible that 'consider' might not accurately operationalise the construct of intention limiting the validity of its predictive power. Other models have used the term 'consider' to capture 'intention' but included a scale or index of questions to measure intent (Davidsson, 1995; Liñán & Chen, 2007; Veciana, Aponte, & Urbano, 2005). Follow up studies could also benefit from establishing time boundaries around the dependent variable as in Krueger *et al.*'s (2000) study that bounded intent through the instrument 'Estimate the probability you'll start your own business in the next five years?' Setting a short-term or long-term time boundary would suggest a more realistic representation of intent (Reitan, 1996). Also, not all process-based variables of motivation are exclusive to social entrepreneurship. Some of the variables such as 'wealth objective' might represent motivations common to both social entrepreneurs as well as commercial entrepreneurs. However, the process-based variables of motivation helped identify students with social entrepreneurial intent who were then analysed for content-based theories of motivation. Lastly, the survey design's use of anonymity unfortunately precludes researchers from following up with students and conducting a longitudinal study with students who confirmed social entrepreneurship intentions. A longitudinal study would have allowed future access to students and confirmation of their actual behaviours providing assessment of the model's robustness and predictive power.

For future research, a cross-cultural research between university social entrepreneurship programmes might produce the most pertinent information. For instance, Rantanen, Pawlak and Tokko (2015) compared Finnish and Polish students' entrepreneurial intentions with results showing that social-political factors between the state and individuals affect intention formation. It would be interesting to extend this study and compare the social entrepreneurial motivation in a larger cross-cultural context overtime to gain additional insights regarding the importance of cultural differences when developing entrepreneurial programmes. Understanding economic and socio-political differences in the formation of socially-driven businesses would produce the most useful results for future social entrepreneurs in an increasingly globalised economy and society.

### REFERENCES

- Abu-Saifan, S. (2012). Social entrepreneurship: definition and boundaries. *Technology Innovation Management Review*, 2(2).
- Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behavior in personality and social psychology. *Advances in Experimental Social Psychology*, 20, 1-63. [https://doi.org/10.1016/S0065-2601\(08\)60411-6](https://doi.org/10.1016/S0065-2601(08)60411-6)

- Ajzen, I. (1991). The Ajzen theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Alvord, S.H., Brown, L.D., & Letts, C.W. (2004). Social entrepreneurship and societal transformation an exploratory study. *Journal of Applied Behavioral Science*, 40(3), 260-282. <https://doi.org/10.1177/0021886304266847>
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). Social and commercial entrepreneurship: same, different, or both?. *Entrepreneurship Theory and Practice*, 30(1), 1-22. <https://doi.org/10.1111/j.1540-6520.2006.00107.x>
- Autio, E., Keeley, R.H., Klofsten, M., & Ulfstedt, T. (1997). Entrepreneurial Intent Among Students: Testing an Intent Model in Asia, Scandinavia and USA. In *Frontiers of Entrepreneurship Research, 1997: Proceedings of the seventeenth annual Entrepreneurship Research Conference* (pp. 133-147). Wellesley, Mass.: Babson College. Retrieved on October 8, 2017 from <http://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-89842>
- Ayob, N., Yap, C.S., Rashid, A., Sapuan, D.A., & Zabid, M. (2013). Social entrepreneurial intention among business undergraduates: An emerging economy perspective. *Gadjah Mada International Journal of Business*, 153(15), 249-267. <https://doi.org/10.22146/gamaijb.5470>
- Bacq, S., & Janssen, F. (2011). The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria. *Entrepreneurship and Regional Development*, 23(5/6), 373-403. <https://doi.org/10.1080/08985626.2011.577242>
- Bagozzi, R.P., Baumgartner, J., & Yi, Y. (1989). An investigation into the role of intentions as mediators of the attitude-behavior relationship. *Journal of Economic Psychology*, 10(1), 35-62. [https://doi.org/10.1016/0167-4870\(89\)90056-1](https://doi.org/10.1016/0167-4870(89)90056-1)
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122. <https://doi.org/10.1037/0003-066X.37.2.122>
- Barba-Sánchez, V., & Atienza-Sahuquillo, C. (2012). Entrepreneurial behavior: Impact of motivation factors on decision to create a new venture. *Investigaciones Europeas de Dirección y Economía de la Empresa*, 18(2), 132-138. [https://doi.org/10.1016/S1135-2523\(12\)70003-5](https://doi.org/10.1016/S1135-2523(12)70003-5)
- Basu, A., & Virick, M. (2008, January). Assessing entrepreneurial intentions amongst students: A comparative study. In *VentureWell. Proceedings of Open, the Annual Conference* (p. 79). National Collegiate Inventors & Innovators Alliance.
- Beardwell, I., Holden, L., & Claydon, T. (2004). *Human resource management – A contemporary approach*. London: Prentice Hall.
- Benzing, C., Chu, H.M., & Kara, O. (2009). Entrepreneurs in Turkey: A factor analysis of motivations, success factors, and problems. *Journal of Small Business Management*, 47(1), 58-91. <https://doi.org/10.1111/j.1540-627X.2008.00262.x>
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442-453. <https://doi.org/10.5465/AMR.1988.4306970>
- Bird, B. (1989). *Entrepreneurial behavior*. Glenview, IL: Scott Foresman.
- Borkowski, N. (2009). *Organizational behavior, theory and design in healthcare*. London: Jones and Bartlett Publishers.
- Boyd, N.G., & Vozikis, G.S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18(4), 63-63.
- Braga, J.C., Proenca, T., & Ferreira, M.R. (2014). Motivations for social entrepreneurship-Evidences from Portugal. *Tékhnē*, 12, 11-21. <https://doi.org/10.1016/j.tekhnē.2015.01.002>
- Boschee, J., (1995). Social entrepreneurs. *Across the Board*, 32(3), 20.

- Brockhaus, R.H., & Horwitz, P.S. (1986). The psychology of the entrepreneur. In D.L. Sexton & R.W. Smilor (Eds.), *The art and science of entrepreneurship* (pp. 25-48). Cambridge: Ballinger.
- Buchanan, L. (2010). Meet the Millennials. *Inc*, 32(67), 166-180.
- Busenitz, L.W., Gomez, C., & Spencer, J.W. (2000). Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management Journal*, 43(5), 994-1003. <https://doi.org/10.2307/1556423>
- Carter, N.M., Gartner, W.B., Shaver, K.G., & Gatewood, E.J. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18(1), 13-39.
- Chen, C.C., Green, P.G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers?. *Journal of Business Venturing*, 13(4), 295-316.
- Certo, S.T., & Miller, T. (2008). Social entrepreneurship: Key issues and concepts. *Business Horizons*, 51(4), 267-271. <https://doi.org/10.1016/j.bushor.2008.02.009>
- Dacin, P., Dacin, M., & Matear, M. (2010). Social entrepreneurship: Why we don't need a new theory and how we move forward from here. *Academy of Management Perspectives*, 24(3), 37-57.
- Davidsson, P. (1995). Culture, structure and regional levels of entrepreneurship. *Entrepreneurship & Regional Development*, 7(1), 41-62. <https://doi.org/10.1080/08985629500000003>
- Deci, E.L., & Ryan, R.M. (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In R.M. Ryan (Ed.), *The Oxford handbook of human motivation* (pp. 85-107). Oxford, UK: Oxford University Press.
- Dees, J.G. (2001). The meaning of 'Social entrepreneurship'. Retrieved on October 8, 2017 from [http://www.caseatduke.org/documents/dees\\_sedef.pdf](http://www.caseatduke.org/documents/dees_sedef.pdf)
- De Jorge-Moreno, J., Laborda Castillo, L., & Sanz Triguero, M. (2012). The effect of business and economics education programs on students' entrepreneurial intention. *European Journal of Training and Development*, 36(4), 409-425. <https://doi.org/10.1108/03090591211220339>
- Dorado, S. (2006). Social entrepreneurial ventures: different values so different process of creation, no?. *Journal of Developmental Entrepreneurship*, 11(04), 319-343. <https://doi.org/10.1142/S1084946706000453>
- Easter, S., & Conway Dato-On, M. (2015). Bridging Ties Across Contexts to Scale Social Value: The Case of a Vietnamese Social Enterprise. *Journal of Social Entrepreneurship*, 6(3), 320-351. <https://doi.org/10.1080/19420676.2015.1049284>
- Ernst, K. (2011). Heart over mind-An empirical analysis of social entrepreneurial intention formation on the basis of the theory of planned behaviour. Unpublished Dissertation, University Wuppertal.
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training*, 30(9), 701-720. <https://doi.org/10.1108/03090590610715022>
- Forster, F., & Grichnik, D. (2013). Social entrepreneurial intention formation of corporate volunteers. *Journal of Social Entrepreneurship*, 4(2), 153-181. <https://doi.org/10.1080/19420676.2013.777358>
- Garba, A.S., Kabir, S., & Nalado, A.M. (2014). An assessment of students' entrepreneurial intentions in tertiary institution: A case of Kano State Polytechnic, Nigeria. *International Journal of Asian Social Science*, 4(3), 434-443.
- Gawell, M. (2013). Social entrepreneurship: action grounded in needs, opportunities and/or perceived necessities?. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 24(4), 1071-1090.
- Giacomin, O., Janssen, F., Pruett, M., Shinnar, R.S., Llopis, F., & Toney, B. (2011). Entrepreneurial intentions, motivations and barriers: Differences among American, Asian and European students. *International Entrepreneurship and Management Journal*, 7(2), 219-238. <https://doi.org/10.1007/s11365-010-0155-y>

- Germak, A.J. (2013). Social Entrepreneurship Motivation: A Quantitative Analysis of Nascent Social Entrepreneurs. In *EMES-SOCENT Conference Selected Papers* (pp. 13-69).
- Germak, A.J., & Robinson, J.A. (2014). Exploring the motivation of nascent social entrepreneurs. *Journal of Social Entrepreneurship*, 5(1), 5-21. <https://doi.org/10.1080/19420676.2013.820781>
- Hansemark, O.C. (1998). The effects of an entrepreneurship programme on need for achievement and locus of control of reinforcement. *International Journal of Entrepreneurial Behavior & Research*, 4(1), 28-50. <https://doi.org/10.1108/13552559810203957>
- Herron, L., & Robinson, R.B. (1993). A structural model of the effects of entrepreneurial characteristics on venture performance. *Journal of Business Venturing*, 8(3), 281-294.
- Hockerts, K. (2015). The social entrepreneurial antecedents scale (SEAS): A validation study. *Social Enterprise Journal*, 11(3), 260-280. <https://doi.org/10.1108/SEJ-05-2014-0026>
- Hockerts, K. (2017). Determinants of social entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 41(1), 105-130. <https://doi.org/10.1111/etap.12171>
- Jayawarna, D., Rouse, J., & Kitching, J. (2011). Entrepreneur motivations and life course. *International Small Business Journal*, 31(1), 34-56. <https://doi.org/10.1177/0266242614525795>
- Kim, M.S., & Hunter, J.E. (1993). Relationships among attitudes, behavioral intentions, and behavior: A meta-analysis of past research, part 2. *Communication Research*, 20(3), 331-364. <https://doi.org/10.1177/009365093020003001>
- Krige, K. (2015). Why social entrepreneurship in South Africa. Retrieved on October 8, 2017 from <http://pressoffice.mg.co.za/gibs/PressRelease.php?StoryID=261102>
- Krueger, N.F. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship Theory and Practice*, 18(1), 5-21. <https://doi.org/10.1177/104225879301800101>
- Krueger, N.F., & Brazeal, D.V. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory and Practice*, 18(3), 91-104. <https://doi.org/10.1177/104225879401800307>
- Krueger, N.F., Reilly, M.D., & Carsrud, A.L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5), 411-432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0)
- Kusa, R. (2016). Measuring Entrepreneurial Orientation in the Social Context. *Entrepreneurial Business and Economics Review* 4(3), 117-129. <https://doi.org/10.15678/EBER.2016.040309>
- Lee, S.M., Chang, D., & Lim, S.B. (2005). Impact of entrepreneurship education: A comparative study of the US and Korea. *International Entrepreneurship and Management Journal*, 1(1), 27-43.
- Lehner, O.M., & Germak, A.J. (2014). Antecedents of social entrepreneurship: Between public service motivation and the need for achievement. *International Journal of Social Entrepreneurship and Innovation*, 3(3), 214-229. <https://doi.org/10.1504/IJSEI.2014.067120>
- Liñán, F. (2005, July). Development and validation of an Entrepreneurial Intention Questionnaire (EIQ). In *IntEnt2005 Conference*.
- Liñán, F., & Chen, Y.W. (2009). Development and Cross-Cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>
- Lumpkin, G.T., Moss, T.W., Gras, D.M., Kato, S., & Amezcuea, A.S. (2013). Entrepreneurial processes in social contexts: how are they different, if at all?. *Small Business Economics*, 40(3), 761-783. <https://doi.org/10.1007/s11187-011-9399-3>
- Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36-44. <https://doi.org/10.1016/j.jwb.2005.09.002>



- Mair, J., & Noboa, E. (2006). Social entrepreneurship: How intentions to create a social venture are formed. In J. Robinson & K. Hockerts (Eds.), *Social entrepreneurship* (pp. 121-135). New York: Palgrave Macmillan.
- Martin, R.L., & Osberg, S. (2007). Social entrepreneurship: The case for definition. *Stanford Social Innovation Review*, 5(2), 28-39.
- Miller, T.L., Grimes, M.G., McMullen, J.S., & Vogus, T.J. (2012). Venturing for others with heart and head: How compassion encourages social entrepreneurship. *Academy of Management Review*, 37(4), 616-640. <https://doi.org/10.5465/amr.2010.0456>
- Mueller, S.L., & Thomas, A.S. (2001). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16(1), 51-75.
- Naffziger, D.W., Hornsby, J.S., & Kuratko, D.F. (1994). A proposed research model of entrepreneurial motivation. *Entrepreneurship: Theory and Practice*, 18(3), 29-43. <https://doi.org/10.1177/104225879401800303>
- Nicholls, A. (2011). Social Enterprise-At the Forefront of Rethinking Business?. *Journal of Social Entrepreneurship*, 2(1), 1-5. <https://doi.org/10.1080/19420676.2011.566764>
- Noel, T.W. (2002). Effects of entrepreneurial education on intent to open a business: An exploratory study. *Journal of Entrepreneurship Education*, 5, 3-13.
- Peredo, A.M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41(1), 56-65. <https://doi.org/10.1016/j.jwb.2005.10.007>
- Politis, K., Ketikidis, P., Diamantidis, A.D., & Lazuras, L. (2016). An investigation of social entrepreneurial intentions formation among South-East European postgraduate students. *Journal of Small Business and Enterprise Development*, 23(4), 1120-1141. <https://doi.org/10.1108/JSBED-03-2016-0047>
- Rantanen, T., Pawlak, A., & Toikko, T. (2015). The Significance of Social Welfare Attitudes in Young People's Entrepreneurial Intentions. *Entrepreneurial Business and Economics Review*, 3(1), 43-60. <https://doi.org/10.15678/EBER.2015.030104>
- Robinson, J. (2006). Navigating social and institutional barriers to markets: How social entrepreneurs identify and evaluate opportunities. In J. Robinson & K. Hockerts (Eds.), *Social entrepreneurship* (pp. 95-120). UK: Palgrave Macmillan.
- Robbins, S.P., & Judge, T. (2013). *Organizational behavior*. Pearson.
- Rokhman, W., & Ahamed, F. (2015). The Role of Social and Psychological Factors on Entrepreneurial Intention among Islamic College Students in Indonesia. *Entrepreneurial Business and Economics Review*, 3(1), 29-42. <https://doi.org/10.15678/EBER.2015.030103>
- Rotter, E.A. (1996). A guide to constructs of control. *Journal of Personality and Social Psychology*, 71(3), 549-570.
- Salamzadeh, A., Azimi, M.A., & Kirby, D.A. (2013). Social entrepreneurship education in higher education: insights from a developing country. *International Journal of Entrepreneurship and Small Business*, 20(1), 17-34.
- Santos, F.M. (2012). A positive theory of social entrepreneurship. *Journal of Business Ethics*, 111(3), 335-351.
- Scheinberg, S., & MacMillan, I. (1988). An eleven-country study of the motivation to start a business. In B. Kirchoff, W. Long, W. McMullan, K. Vesper, & W. Wetzel (Eds.), *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.
- Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behaviour & Research*, 11(1), 42-57.
- Shane, S., Locke, E.A., & Collins, C.J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13(2), 257-279.

- Shapero, A., & Sokol, L. (1982). Social dimensions of entrepreneurship. In C.A. Kent, D.L. Sexton, & K.H. Vesper. (Eds.), *Encyclopaedia of Entrepreneurship* (pp. 72-90). Englewood Cliffs, NJ: Prentice Hall.
- Shaw, E., & Carter, S. (2007). Social entrepreneurship: Theoretical antecedents and empirical analysis of entrepreneurial processes and outcomes. *Journal of Small Business and Enterprise Development*, 14(3), 418-434.
- Short, J.C., Moss, T.W., & Lumpkin, G.T. (2009). Research in social entrepreneurship: Past contributions and future opportunities. *Strategic Entrepreneurship Journal*, 3(2), 161-194.
- Souitaris, V., Zerbini, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566-591. <https://doi.org/10.1016/j.jbusvent.2006.05.002>
- Stefanovic, I., Prokic, S., & Ranković, L. (2010). Motivational and success factors of entrepreneurs: The evidence from a developing country. *Proceedings of Rijeka Faculty of Economics*, 28(2), 251-269.
- Tiwari, P., Bhat, A.K., & Tikoria, J. (2017). An empirical analysis of the factors affecting social entrepreneurial intentions. *Journal of Global Entrepreneurship Research*, 7(1), 9. <https://doi.org/10.1186/s40497-017-0067-1>
- Tubbs, M.E., & Ekeberg, S.E. (1991). The role of intentions in work motivation: Implications for goal-setting theory and research. *Academy of Management Review*, 16(1), 180-199. <https://doi.org/10.2307/258611>
- Royal Bank of Canada (2014). *Meaningful business: Understanding social entrepreneurs* [White Paper]. Retrieved on October 8, 2017 from [http://www.rbc.com/community-sustainability/\\_assets-custom/pdf/Meaningful-Business.pdf](http://www.rbc.com/community-sustainability/_assets-custom/pdf/Meaningful-Business.pdf)
- Urban, B., & Kujinga, L. (2017a). The institutional environment and social entrepreneurship intentions. *International Journal of Entrepreneurial Behaviour & Research*, 23(4), 638-655. <https://doi.org/10.1108/IJEBr-07-2016-0218>
- Urban, B., & Kujinga, L. (2017b). Towards social change: South African university students as social entrepreneurs. *South African Journal of Higher Education*, 31(1), 243-259. <https://doi.org/10.20853/31-1-872>
- Veciana, J.M., Aponte, M., & Urbano, D. (2005). University students' attitudes towards entrepreneurship: A two countries comparison. *The International Entrepreneurship and Management Journal*, 1(2), 165-182. <https://doi.org/10.1007/s11365-005-1127-5>
- Visser, K. (2011). Social entrepreneurship in South Africa: context, relevance and extent. *Industry and Higher Education*, 25(4), 233-247. <https://doi.org/10.5367/ihe.2011.0050>
- Wach, K., & Wojciechowski, L. (2016). Entrepreneurial Intentions of Students in Poland in the View of Ajzens Theory of Planned Behaviour. *Entrepreneurial Business and Economics Review*, 4(1), 83-94. <https://doi.org/10.15678/EBER.2016.040106>
- Weerawardena, J., & Mort, G.S. (2006). Investigating social entrepreneurship: A multidimensional model. *Journal of World Business*, 41(1), 21-35. <https://doi.org/10.1016/j.jwb.2005.09.001>
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 31(3), 387-406.
- Zahra, S., & Dess, G. G. (2001). Entrepreneurship as a field of research: Encouraging dialogue and debate. *Academy of Management Review*, 26(1), 8-10. <https://doi.org/10.5465/AMR.2001.4011916>
- 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. <https://doi.org/10.1016/j.jbusvent.2008.04.007>

### Authors

The contribution of co-authors is equal and can be expressed as 33% each of the authors: R. Schafer prepared the research tools and research methodology, while S. Canavati prepared the statistical analysis and calculations, and M. Barton prepared the literature review and discussion.

#### Renata Schafer

Renata Schaefer received her Ph. D. from Poznan University of Economics in Poznan/Poland. Her expertise includes teaching a variety of courses in different European locations on Management and International Business. She is the author of "Cross-Cultural Management in a Uniting Europe", as well as two business case studies and many articles researching the significance of intercultural competencies, leadership styles and CSR in an international context. She works currently at Sonoma State University School of Business and Economics.

**Correspondence to:** Dr. Renata Schaefer, Sonoma State University, School of Business and Economics, Office: STEV 2060, 1801 East Cotati Avenue, Rohnert Park, CA, 94928, USA, e-mail: renata.schaefer@sonoma.edu

#### Marieshka Barton

Marieshka Barton has a Wine MBA from Sonoma State University (Rohnert Park, California) and a B.S. (Summa Cum Laude) in Environmental Science with a concentration in Environmental Ethics from Humboldt State University, California. She works in the Sonoma County wine industry in marketing and sales and has been a business guest lecturer and wine business researcher for classes and projects affiliated with Sonoma State University School of Business and Economics.

**Correspondence to:** Marieshka Barton, Sonoma State University, School of Business and Economics, Office: STEV 2060, 1801 East Cotati Avenue, Rohnert Park, CA, 94928, USA, e-mail: bartonm@sonoma.edu

#### Sergio Canavati

Sergio Canavati is an assistant professor of management at Sonoma State University. His research focuses on entrepreneurial opportunity recognition, family firms, and entrepreneurial leadership. Sergio also collaborates with North Coast SCORE to advice small and medium family businesses in the region.

**Correspondence to:** Dr. Sergio Canavati, Sonoma State University, School of Business and Economics, Office: STEV 2060, 1801 East Cotati Avenue, Rohnert Park, CA, 94928, USA, e-mail: canavati@sonoma.edu

### Acknowledgements and Financial Disclosure

The authors would like to express their gratitude to the blind reviewers for their insightful and constructive comments that helped improve the final draft of this paper.

### Copyright and License



This article is published under the terms of the Creative Commons Attribution – NoDerivs (CC BY-ND 4.0) License  
<http://creativecommons.org/licenses/by-nd/4.0/>

Published by the Centre for Strategic and International Entrepreneurship – Krakow, Poland

