

Predictors of Entrepreneurial Intentions and Social Entrepreneurial Intentions: A Look at Proactive Personality, Self-Efficacy and Creativity

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The purpose of this study is to examine the relative contribution of proactive personality, creativity, and self-efficacy in predicting entrepreneurial intentions (EI) and social entrepreneurial intentions (SEI). Data was collected via online surveys using the snowball technique from students attending a university in the North West United States (n=210). Entrepreneurial self-efficacy and creativity were significant predictors of entrepreneurial intentions while only proactive personality significantly predicted social entrepreneurial intentions. The results point to the importance of studying the differential contributions of these variables to intentions to either start a for-profit enterprise or a social entrepreneurial venture.

INTRODUCTION

Economic growth greatly depends on creation of new firms and this may explain the sustained research interest in entrepreneurs and entrepreneurship (Low, & Macmillan, 1988). There is some consensus on major phases of the entrepreneurship process and some major categories of variables that may play a role in each phase (Baron, 2007). However, studies on the relative importance of the multitude of variables that influence the formation of entrepreneurial intentions, a critical first step in entrepreneurship, have yielded mixed results (Baron, 2007; Zhao, Seibert, & Lumpkin, 2010). Additionally, there is a paucity of studies comparing the relative importance of various variables in predicting both entrepreneurial intentions (EI) and social entrepreneurial intentions (SEI).

The earliest approaches to understanding entrepreneurship was premised on the idea that it involved individuals with unique personality characteristics and abilities (Crant, 1996) and thus the focus was on investigating entrepreneurs and their personality. Several personality traits and attributes have been fronted as important in predicting entrepreneurial outcomes. Of the big five personality traits, Leutner, Ahmetoglu, Akhtar, and Chamoro-Premuzic (2014) found that high conscientiousness, openness to experience and extraversion, and low neuroticism were associated with entrepreneurship, while

agreeableness was not associated with intention to start a business. Zhao and Seibert (2006) found that entrepreneurs were likely to report higher scores on conscientiousness, openness to experience, and low on agreeableness and neuroticism when compared to managers. There was no difference on extraversion. Other constructs associated with entrepreneurship include proactive personality (Rauch & Frese, 2007; Prieto, 2011), creativity (Prieto, 2011; Phipps, Prieto & Kungu, 2015), high achievement motivation (Brandstatter, 2011; Gartner, 1985; Stewart, Watson, Carland, & Carland, 1998), risk-taking propensity (Brandstatter, 2011; Gartner, 1985; Rauch & Frese, 2007; Stewart, Watson, Carland, & Carland, 1998), high need for autonomy (Low & Macmillan, 1988; Rauch & Frese, 2007), internal locus of control (Gartner, 1985; Rauch & Frese, 2007), generalized self-efficacy and stress tolerance (Rauch & Frese, 2007). Despite decades of research following this stream, consensus has yet to be attained as to the importance and strength of various personality variables as predictors of various measures of entrepreneurial intentions, behavior and success (Leutner, Ahmetoglu, Akhtar, & Chamoro-Premuzic, 2014; Rauch & Frese, 2007). However, recent meta-analytical studies have helped address this deep-rooted skepticism in the entrepreneurship literature (Rauch & Frese, 2007) and resuscitated the interest in research on the role of personality in entrepreneurship (Zhao, Seibert, & Lumpkin, 2010).

This study aims to contribute to this literature by investigating the influence of selected personality characteristics and beliefs on intentions to start a business: a critical first step in the entrepreneurial process (Zhao, Seibert, & Lumpkin, 2010). Specifically, we compare the relative contribution of the following variables to entrepreneurial intentions (EI) and social entrepreneurial intentions (SEI): proactive personality, creativity, and self-efficacy.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Entrepreneurship and Social Entrepreneurship

Even though at its essence, entrepreneurship is the same, distinctions have been made between entrepreneurship for profit and social entrepreneurship (Hockerts, 2017; Mair & Noboa, 2006; Ozturk, 2013). Both forms of entrepreneurship can be described as processes of organizational emergence (Gartner, Bird, & Starr, 1992), or processes of seizing opportunities and resources available in the creation of new products and services (Gerber, 1995). Nonetheless, Mair and Noboa (2006) aver that social entrepreneurs differ from for-profit entrepreneurs in their motivations, opportunities and outcomes. Social entrepreneurs have different motivations that lead them to exploit different kinds of opportunities; their means of exploiting those opportunities may be different from for-profit entrepreneurs; and they pursue both social and economic outcomes (Mair & Noboa, 2006). Social entrepreneurs emphasize socially targeted goals (Ozturk, 2013) and social impact (Hockerts, 2017) more while conventional entrepreneurs emphasize economic goals more (Roy, Brumagim, & Goll, 2014). Given the similarities and differences between social entrepreneurship and for-profit entrepreneurship, it is anticipated that some antecedent factors known to be related to for-profit entrepreneurship will also be important in influencing social entrepreneurship while some may be related to for-profit entrepreneurship and not to social entrepreneurship. It is important to investigate the extent to which various antecedent variables are related to entrepreneurship and social entrepreneurship (Roy, Brumagim, & Goll, 2014).

Studies on antecedents of entrepreneurial activity have relied on the theory of planned behavior which posits that an individual's intention to perform a behavior is a reliable predictor of actual behavior (Ajzen, 1991). These intentions are predicted by attitudes toward the behavior, subjective norms regarding the behavior, and perceived behavioral control over the behavior (Ajzen, 1991). Attitudes toward the behavior refers to the favorable or unfavorable opinion that an individual has towards the behavior and depends on the expectations of personal impact resulting from the behavior. Subjective norms refer to the perception of social pressure to perform the behavior based on expected and accepted behavior. These perceptions are formed by the people in an individual's life. Perceived behavioral control is the degree to which an individual feels they could perform the behavior successfully. A combination of actual and perceived inadequacies as well as external limitations, can impact the ability to perform the behavior. /' found significant support for TPB as a predictor of entrepreneurial intent when they applied a competing

model approach to test the relative predictive power of TPB compared with Shapero's (1982) intentions-based model of entrepreneurial events. Mair and Naboia (2006) called for the amendments to the theory of planned behavior to accommodate the social entrepreneurial context. They suggested four antecedents to social entrepreneurship: empathy as a proxy for attitudes, moral judgment as a proxy for social norms, social entrepreneurial self-efficacy as a proxy for behavioral control and perceived presence of social support as a proxy for external behavioral control.

This study is focused on investigating the relative contribution of proactive personality, creativity and self-efficacy to entrepreneurial intentions and social entrepreneurial intentions. These variables are conceptualized as contributing to perceived behavioral control in both Ajzen's (1991) and Mair and Naboia's (2006) models. Having a proactive personality, self-efficacy and creativity are likely to contribute to perceived ease of engaging in entrepreneurial activity.

Proactive Personality

A person's personal disposition towards proactive behavior is measured by the extent to which they take action to influence their environments (Bateman & Crant, 1993). Individuals with a prototypical proactive personality identify opportunities and act on them, show initiative, take action, and persevere until meaningful change occurs (Crant, 2000). Less proactive individuals are passive and reactive, preferring to adapt to circumstances rather than change them (Crant, 2000).

Proactive personality is important for entrepreneurs because by definition, entrepreneurs have to be self-starting and influence their environment by founding new businesses, and identifying and acting on opportunities. People high in proactive personality want to influence the environment (Rauch & Frese, 2007). Studies have found a positive association between proactive personality and entrepreneurial intentions (Crant, 1996; Rauch & Frese, 2007). Few studies that have explored the relationship between proactive personality and social entrepreneurship, and even fewer studies have explored the influence of proactive personality and both forms of entrepreneurship within the same sample. Prieto (2011) found a positive association between proactive personality and social entrepreneurial intentions among African American and Hispanic students. It is expected that proactive personality as a trait, with its attendant proclivity for influencing or changing the environment, may contribute positively to both entrepreneurial and social entrepreneurial behavior.

Entrepreneurial Self-efficacy

Self-efficacy refers to "people's belief in their capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over events in their lives" (Wood & Bandura, 1989: 364). It is the strength of one's belief in their ability to complete tasks or achieve goals (Ormrod, 2006). Past studies have found that generalized self-efficacy and entrepreneurial self-efficacy to be highly relevant to entrepreneurial phenomena and have associated it with intentions to start a business (Ajzen, 2002; Baughn et al., 2006; Krueger, Reilly, & Carsrud (2000); Peterman & Kennedy, 2003; Rauch & Frese, 2007; Segal, Borgia, & Schoenfeld, 2002). Hockerts (2017) employing a self-efficacy scale developed for the social entrepreneurship domain found that social entrepreneurial self-efficacy was positively associated with social entrepreneurial intentions. Baron (2007) suggests that the belief that one can accomplish things they set out to accomplish may play a role in the initial stages of the entrepreneurial process by moving individuals to conclude that they can convert their ideas into companies. Given that social challenges are daunting, and that social entrepreneurship typically operates in the context of resource constraints, self-efficacy is especially important in enabling individuals to view social ventures as feasible, and in persisting to start a venture even in the face of challenges (Hockerts, 2017; Mair & Naboia, 2006). It is thus expected that self-efficacy will positively contribute to both entrepreneurial and social entrepreneurial intentions.

Creativity

Creativity is an essential factor in the creation of new ventures. Entrepreneurship is a process through which new or improved products, services, or processes are introduced in the market. Thus, one can

expect that individuals with creative abilities would be better able to devise new and/or improved products, services, and processes. According to Zhao and Seibert (2006) creativity is especially important in one of the early critical tasks of entrepreneurship, opportunity recognition. Studies have significantly linked creativity to opportunity recognition (Baron, 2008). Additionally, creativity can also be considered as an element of perceived behavioral control in that it can influence an entrepreneur's perception of the ease of engaging in entrepreneurial activity (Phipps, Prieto & Kungu, 2015). Beyond opportunity recognition, creativity can contribute to the entrepreneurial process by helping entrepreneurs resolve day-to-day problems (Zhao & Seibert, 2006). It is expected that creativity plays a role in both entrepreneurship for profit and social entrepreneurship. Baron (2008), while discussing entrepreneurship for profit, shared that ideas for new products and services emerge from a process called creative cognition where by which existing cognitive frameworks are combined in new ways resulting in new ideas not previously thought possible. Guclu, Dees, and Anderson (2002) aver that for social entrepreneurs, creativity plays a great role in idea generation, and also in the process of refining an idea into an opportunity with possible social impact. Generating a workable idea, and converting it into a feasible opportunity "...requires an on-going creative process working hand-in-hand with focused analysis..." (Guclu, Dees, & Anderson, 2002, p. 1). It is anticipated that creativity is an important factor in both forms of entrepreneurship.

Thus, we hypothesize the following:

H1. Proactive personality, entrepreneurial self-efficacy, and creativity are positively related to entrepreneurial intentions.

H2. Proactive personality, entrepreneurial self-efficacy, and creativity are positively related to social entrepreneurial intentions.

H3. Proactive personality, entrepreneurial self-efficacy, and creativity will predict entrepreneurial intentions.

H4. Proactive personality, entrepreneurial self-efficacy, and creativity will predict social entrepreneurial intentions.

METHODS

Participants

Data was collected from participants in the study via online surveys using the snowball technique. Full-time, degree seeking, undergraduate students located at a university in the North West United States participating in several classes led by one of the investigators were requested to complete the survey, and forward a link to the survey to their friends and encourage them to participate. Extra credit was provided to students who solicited responses to the survey. Responses were received from a convenience sample of 201 participants. Of the 210 respondents, 123 (58.6%) were females and 87 (41.4%) were male. The age ranged from 18 to 51 years old, with the mean being 24.59 years old. The categories of race were broken down into two categories due to low response rate from other races: Caucasian and Minority. About 52% of the respondents were Caucasians (n=116) and 44.8% were Minority/Other.

Measures

The variables of interest in this study proactive personality, self-efficacy, creativity, entrepreneurial intentions, and social entrepreneurial intentions. Gender, race and were demographic control variables adjusted for in our analyses. We created two race categories (White and Other) due to low response rate from other races.

Proactive personality was measured using the 10-item version of Bateman and Crant's (1993) measure refined by Siebert, Crant and Krainer (1999). A sample statement is "I am always looking for a

better way to do things.” All statements were rated on a 7-point scale ranging from Strongly disagree (1) to Strongly agree (7). The internal consistency of the abbreviated scale was good (Cronbach alpha=.894). A higher score indicates a more highly proactive personality.

Entrepreneurial Self-efficacy was measured by a 6-item self-assessment scale. The items on this scale represent competencies related to entrepreneurial success, and were developed based on expert interviews with business leaders (Marlino & Wilson, 2003). Respondents were asked to compare themselves to “others in their peers (others in their current year/enrollment year/classification in college).” The respondents rated their self-efficacy on a 5-point Likert scale, ranging from a lot worse (1) to a lot better (5). A sample question included “Comparing yourself with your peers, how do you rate yourself in the following areas? - Being able to solve problems.” The coefficient alpha estimate of reliability was 0.729.

Creativity was measured by the ten-item Problem Solving/Creativity Subscale (PSCS) from the Self-Description Questionnaire III (SDQ III), developed by *Marsh and O’Neill (1984)*. A sample statement is “I am good at combining ideas in ways that others have not tried.” The items were rated on an 8-point scale, ranging from Definitely false (1) to Definitely true (8). The coefficient alpha estimate of reliability was 0.814.

Entrepreneurial intention was assessed using the five-item entrepreneurial decision scale developed by Chen, Greene, and Crick (1998). A sample statement was “I am interested in setting up my own business”, with responses on a five-point Likert scale. The coefficient alpha estimate of reliability was 0.80.

Social entrepreneurial intention was assessed using a modified version of the entrepreneurial decision scale originally developed by Chen, Greene, and Crick (1998) and modified by Prieto (2011). A sample question was “I have considered setting up an organization and/or initiative that strives to advance positive social change.” The coefficient alpha estimate of reliability was 0.875.

TABLE 1
DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS (N = 210)

Variable	No. (%)
Sex; No. (%)	
Male	87 (41.4)
Female	123 (58.6)
Race; No. (%)	
White	116 (55.2)
Other	94 (44.8)
Age in Years; mean (SD); (min, max) (n=209)	24.6 (6.59); (18, 51)

Analysis

Frequencies, percentages, means, and standard deviations were used to describe the respondents on the basis of demographic characteristics (i.e., gender, race, and age) and psycho-social characteristics (i.e., creativity, proactive personality, entrepreneurial self-efficacy, and entrepreneurial intentions).

Pearson Product Moment Correlation Coefficient was used to determine the relationships between entrepreneurial self-efficacy, creativity and proactive personality, and entrepreneurial intentions and social entrepreneurial intentions. OLS Regression was used to determine whether self-efficacy, creativity and proactive personality predict entrepreneurial intentions and social entrepreneurial intentions. Two regression models were run, one with entrepreneurial intentions as the outcome and the other with social entrepreneurial intentions as the outcome.

RESULTS

Means, standard deviations, and correlations among study variables are shown in Table 2. Results from the two regression models are displayed in Table 3. On average, the respondents in this sample reported high proactive personality ($M= 5.57$, $SD= 0.80$); moderate creativity ($M= 5.65$, $SD=0.99$); high entrepreneurial self-efficacy ($M= 3.77$, $SD= 0.55$); moderate entrepreneurial intentions ($M=2.77$, $SD=1.09$); and moderate social entrepreneurial intentions ($M=3.29$, $SD=0.96$).

TABLE 2
MEANS, STANDARD DEVIATIONS, AND CORRELATIONS AMONG STUDY
VARIABLES (N = 210)

	Mean (SD)	Min, Max	1	2	3	4
1 Proactive Personality	5.6(0.8)	2.4, 7				
2 Entrepreneurial Self-Efficacy	3.8 (0.55)	1, 5	.442**			
3 Creativity	5.7 (0.99)	3, 8	.574**	.559**		
4 Entrepreneurial Intentions	2.8 (1.09)	1, 5	.297**	.322**	.354**	
5 Social Entrepreneurial Intentions	3.3 (0.95)	1, 5	.482**	.295**	.291**	.362**

***r* is significant at $p < .01$; * $p < .05$

Overall, the results offered support for hypothesis 1, which posited that proactive personality, entrepreneurial self-efficacy and creativity are positively related to entrepreneurial intentions. Entrepreneurial intentions was positively correlated with proactive personality ($r = 0.297$, $p < 0.01$), entrepreneurial self-efficacy ($r = 0.322$, $p < 0.01$), and creativity ($r = 0.354$, $p < 0.01$).

Social entrepreneurial intentions was positively correlated with proactive personality ($r = 0.482$, $p < 0.01$), entrepreneurial self-efficacy ($r = 0.295$, $p < 0.01$), and creativity ($r = 0.291$, $p < 0.01$), offering support for hypothesis 2.

Hypothesis 3 posited that proactive personality, entrepreneurial self-efficacy, and creativity will predict entrepreneurial intentions. The regression model with the three predictors and demographic control variables was significant in predicting entrepreneurial intentions, explaining 20% of the variance in entrepreneurial intentions ($F_{6, 202} = 8.416$, $p < 0.01$). In this model, entrepreneurial self-efficacy ($t = 0.303$, $p < 0.05$) and creativity ($t = 0.195$, $p < 0.05$) were significant in predicting entrepreneurial intentions. Proactive personality was not a significant predictor of entrepreneurial intentions in a model that includes entrepreneurial self-efficacy and creativity.

Hypothesis 4 stated that proactive personality, entrepreneurial self-efficacy, and creativity will predict social entrepreneurial intentions. The regression model with the three predictors and demographic control variables was significant in predicting social entrepreneurial intentions, explaining 26.3% of the variance in social entrepreneurial intentions ($F_{6, 202} = 12$, $p < 0.01$). Of the three variables, proactive personality was the only variable that was significant in predicting social entrepreneurial intentions ($t = 0.521$, $p < 0.05$). Entrepreneurial self-efficacy and creativity were not significant predictors of social entrepreneurial intentions in this model that explored the relative contribution of the three variables to social entrepreneurial intentions.

TABLE 3
REGRESSION ANALYSIS FOR THE RELATIONSHIPS BETWEEN PROACTIVE PERSONALITY, ENTREPRENEURIAL SELF-EFFICACY, CREATIVITY, AND ENTREPRENEURIAL INTENTIONS AND SOCIAL ENTREPRENEURIAL INTENTIONS

Variables	Entrepreneurial Intentions	Social Entrepreneurial Intentions
Intercept	-0.838 (0.618)	-0.143 (0.516)
Race (Other)	0.125 (0.144)	0.188 (0.120)
Gender	-0.340 (0.142) *	0.111(0.119)
Age	0.024 (0.011)*	-0.013 (0.009)
Proactive Personality	0.165 (0.106)	0.521 (0.089)**
Entrepreneurial Self-Efficacy	0.303 (0.152)*	0.204 (0.127)
Creativity	0.195 (0.093)*	-0.014 (0.078)
Number of observations	208	208
F	8.416**	12.00**
R-square	0.20	0.263

Robust standard errors are in parentheses. Statistical levels of significance are: * indicates $p < 0.05$, ** indicates $p < 0.01$. Reference categories: Gender (male) and race (Caucasian).

Discussion and Implications

This study sought to investigate the differential contributions of three variables: proactive personality, entrepreneurial self-efficacy, and creativity to intentions to either start a for-profit enterprise or a social entrepreneurial venture. This contributes to the literature aimed at exploring and comparing antecedents for entrepreneurial intentions and social entrepreneurial intentions. Scholars such as Ozturk (2013) and Roy, Brumagim, and Goll (2014) argue that whereas there may be fundamental differences between for-profit and social entrepreneurship especially in terms of motivations for venture creation, there is the possibility that the two forms of entrepreneurship may have underlying similarities. There is thus a need to investigate whether known antecedents for for-profit entrepreneurship also apply to social entrepreneurship (Roy, Brumagim, & Goll, 2014).

Proactive personality, entrepreneurial self-efficacy and creativity were all positively correlated with entrepreneurial intentions. For this sample, creativity showed the greatest correlation with entrepreneurial intentions followed by entrepreneurial self-efficacy, while proactive personality has the weakest correlation. On the other hand, proactive personality, entrepreneurial self-efficacy and creativity were all positively correlated with social entrepreneurial intentions. However, proactive personality had the strongest correlation with social entrepreneurial intentions, followed by self-efficacy, and then creativity. These results indicate that all three variables are positively related to both forms of entrepreneurship. However, difference may lie in the relative importance of each of the three variables in the formation of intentions to start a for-profit or social entrepreneurial venture.

In a further test of the relative contribution of each of the three variables in uniquely predicting entrepreneurial intentions, entrepreneurial self-efficacy and creativity were significant predictors while proactive personality was not. With regards to social entrepreneurial intentions, proactive personality was significant, while entrepreneurial self-efficacy and creativity were not significant predictors.

There was an expectation that proactive personality would be important for both forms of entrepreneurship. People high in proactive personality are self-starters who take action to influence their environments, and by extension found new ventures by identifying and exploiting opportunities in their environments (Rauch & Frese, 2007). We thus expect that they will be inclined to start for-profit ventures. According to Kim, Hon, and Crant (2009) people with a proactive personality also have a felt responsibility for constructive change, and thus we can expect proactive personality to also be associated with social entrepreneurial intentions. For this sample, proactive personality was only important for

predicting social entrepreneurial intentions and not for-profit entrepreneurial intentions. The results were contradictory of findings from other studies that have found proactive personality to be associated with social entrepreneurial intentions (e.g. Crant, 1996; Rauch & Frese, 2007), and were consistent with those that have found a positive association between proactive personality and social entrepreneurial intentions (e.g. Prieto, 2011). Even though there is overwhelming evidence for the association of proactive personality with for-profit entrepreneurial intentions, the results of this study indicate the importance of continuing with this stream of research as this relationship may be different for different samples. These results add to the evidence that proactive personality is associated with social entrepreneurial intentions and thus important for social entrepreneurial venture formation. According to Guclu, Dees, and Anderson (2002) creating social entrepreneurial ventures may be especially demanding as entrepreneurs often have to deal with more constrained resources than for-profit entrepreneurs, and they often have to balance between ambitious social impact goals with great resource scarcity. But based on our understanding of proactive personalities as people who are relatively unconstrained by situational forces and who take it upon themselves to influence the world around them (Bateman & Crant, 1993), it is possible that the challenges posed by social entrepreneurial ventures may be attractive to people high in proactive personality and thus may explain its influence on social entrepreneurial intentions.

According to Rauch and Frese (2007) people with generalized self-efficacy have confidence to perform tasks associated with entrepreneurship and are likely to persist when problems arise. It was thus expected that having confidence in one's ability to perform entrepreneurial-related tasks would be related to intentions to start either for-profit or social entrepreneurial venture. Entrepreneurial self-efficacy only significantly predicted for-profit entrepreneurial intentions and not social entrepreneurial intentions. The results were consistent with previous research that linked entrepreneurial self-efficacy with for-profit entrepreneurial intentions (Peterman and Kennedy, 2003; Rauch & Frese, 2007; Segal, Borgia, & Schoenfeld, 2002). One possible reason why entrepreneurial self-efficacy did not predict social entrepreneurial intentions for this study may have to do with measurement; entrepreneurial self-efficacy is more geared to capabilities associated with for-profit entrepreneurship than social entrepreneurship. According to Hockerts (2017) self-efficacy, typically measured as "an individual's belief in their ability to start a venture" (p. 109), is inappropriate for a social entrepreneurial context. She developed a measure of social entrepreneurial self-efficacy that measures a "person's belief that individuals can contribute towards solving societal problems" (Hockerts, 2017, p. 109) and "belief that looming social problems can be tackled by them" (p. 124). Future studies should incorporate this measure as it is more appropriate for the social entrepreneurship domain.

It was expected that creativity would predict intentions to start both for-profit and social entrepreneurial intentions. Researchers agree that creativity is central to the process of entrepreneurship as the process of coming up with new products, services, or processes requires creative ability (Stewart, Watson, Carland, & Carland, 1998; Zhao & Seibert, 2006). Social and for-profit entrepreneurs are differentiated from others based on their innovative way of thinking. Creativity and out of the box thinking is necessary and important for social entrepreneurship especially in developing resource strategies and in the iterative process of defining social impact (Guclu, Dees, & Anderson, 2002). For this sample, creativity only predicted entrepreneurial intentions and not social entrepreneurial intentions. This underlines the importance of studying these variables with different populations.

These results suggest that, while all three variables have significant positive relationships with entrepreneurial and social entrepreneurial intentions, they differ in their unique contributions to the formation of intentions to start either entrepreneurial or social entrepreneurial ventures. Thus, there is a need to encourage the development of these three traits to enhance people's intentions to start both types of businesses. However, when the aim is to encourage intentions to start a business for profit, more emphasis should be placed on entrepreneurial self-efficacy and creativity, and when focusing on social entrepreneurial intentions, more emphasis should be placed on development of proactive personality. One implication here targeting those who develop programs to encourage entrepreneurship is to try and match the development of traits based on the type of entrepreneurship being sought.

Given that some of the factors that influence entrepreneurial intentions can be altered (Tkachev & Kolvereid, 1999), there are some suggestions for increasing for profit and social entrepreneurial intentions. According to Bateman and Crant (1993) proactive people tend to participate in activities whose primary mission is constructive change. We suggest encouraging people to engage in activities typically engaged in by proactive people in the hope that they may encourage development of proactive personality and ultimately entrepreneurial intentions. Bateman and Crant (1993) suggest that proactive people engage in professional activities that enhance their interpersonal networks, and also tend to engage in volunteering and charity-related activities that improve their lives and communities. Hockerts (2017) also suggests that encouraging people to take advantage of service learning opportunities, optional volunteering opportunities and project work in areas with great social needs might spur social entrepreneurial intentions. Prior practical experience with social problems is a significant predictor of social entrepreneurial intentions (Hockerts, 2017). According to Chaudhary (2017) encouraging people to take classes in entrepreneurship, and engaging them in business games and simulations can increase self-efficacy beliefs and thus increase intentions to start a business. Suggestions by Hockerts (2017) on exposing people to social problems through service learning in social organizations can increase social entrepreneurial self-efficacy, and ultimately social entrepreneurial intentions.

LIMITATIONS

A limitation of this study stems from the cross-sectional nature of the data used in this study. Additionally, data was collected through a snowball technique which can lead to a biased sample. This limits the generalizability of the study results. If possible, future studies should collect and utilize longitudinal data. An additional limitation of this study is that the key variables in the study were single source, self-report and perception measures. Future studies should incorporate other sources of data, and if possible more objective measures.

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