Available online at www.ijournalse.org

Emerging Science Journal

(ISSN: 2610-9182)

Vol. 9, No. 3, June, 2025

Driving Social Entrepreneurship Among Students: Investigating Through PLS-SEM and fsQCA Approaches in Emerging Economies

Rubaiyat Sabbir [1], Bashir Uddin [1], Subrata Kumar [2*], Md. Rashed [3], Yeanur Rahman [4], Sourav Paul Chowdhury [5], Munmun Rahaman [2], Mohammad Fakhrul Islam [6*]

[1] *Faculty of Business Studies, Gopalgan Science and Technology University, Gopalganj, Bangladesh.*

[2] *Department of Business Administration, Faculty of Business and Economics, Central Women's University, Dhaka, Bangladesh.*

[3] *College of Business Administration, International University of Business Agriculture and Technology, Dhaka, Bangladesh.*

[4] *Head of Business and Branch, National Credit and Commercial Bank PLC, Bangladesh.*

[5] *Faculty of Business Studies, Hajee Mohammad Danesh Science and Technology University, Bangladesh.*

[6] *Sustainability Competence Center, Széchenyi István University, Győr, Hungary.*

Abstract

This study aims to identify the relationship between social self-efficacy, social innovation, resilience, and proactive personality concerning university students' behavioral intention to engage in social entrepreneurship, particularly in emerging economies, like Bangladesh. A structured questionnaire was utilized to collect quantitative data from 540 students in various disciplines of study as part of the study's quantitative research methodology using partial least squares-Structural Equation Modelling (PLS-SEM) and fuzzy-set Qualitative Comparative Analysis (fsQCA). The analysis reveals that proactive personality traits are associated with the social entrepreneurship intention (SEI) and that leadership orientation is also significant to SEI. The study also demonstrates that social entrepreneurial activities tend toward higher social self-efficacy and resilience, making it crucial to focus on such characteristics while facing social risk and bearing innovations. This study's novelty lies in its focus on the unique combination of psychological traits—social self-efficacy, social innovation, resilience, and proactive personality—and their impact on university students' intention to engage in social entrepreneurship in emerging economies. Additionally, the research emphasizes the importance of integrating leadership skills and social innovation into academic curricula and policy development to foster social entrepreneurship. Practical implications indicate that leadership skills and social innovation should be included in the curricula of educational institutions, and supportive policies should be developed to create available resources for prospective social entrepreneurs.

Keywords:

Social Entrepreneurship Intention;
Self-efficacy;
Social Innovation;
Resilience;
Proactive Personality;
PLS-SEM;
fsQCA.

Article History:

Received:	23	January	2025
Revised:	14	April	2025
Accepted:	23	April	2025
Published:	01	June	2025

1- Introduction

Social entrepreneurship is now considered a powerful tool for systematic social change as well as sustainable social innovation as a response to the multifaceted world's problems [1]. This promising sector of study needs people to have social responsiveness, vision, and spirit of entrepreneurship to come up with unique ideas that address vociferous social problems [2]. However, as social entrepreneurship gains attention more often, its driving force, combining the social

* **CONTACT**: subrata.kumar@cwu.edu.bd; fakhrul@stamford.university

DOI: http://dx.doi.org/10.28991/ESJ-2025-09-03-023

and economic objectives, still holds a research gap. To forecast intentions toward social entrepreneurship and to further research what can encourage and maintain dedication to the cause, this effort will investigate the relationship between social self-efficacy, social innovation, resilience, and proactive personality [3-5]. This research is informed by the growing appreciation of social entrepreneurs as key agents in realizing sustainable development objectives, including poverty, equitable wealth distribution, and healthier and enlightened populations. Understanding what leads people towards social entrepreneurship may go a long way in developing a new crop of socially responsible leaders equipped to handle current societal challenges [6].

By combining the ideas of social self-efficacy, resilience, and proactive personality to forecast students' intentions to engage in social entrepreneurship, this study builds on previous research on student-driven social entrepreneurship in emerging economies. Although earlier research has examined how entrepreneurial self-efficacy and education impact entrepreneurial inclinations [7-9], This study offers a more thorough knowledge of the provocations behind social entrepreneurship pretensions by combining these rudiments in a new way with proactive personality traits and resilience. Additionally, the emphasis on social innovation as a predictor of social entrepreneurial intention is in line with the viewpoints of Duncan-Horner et al. (2022) [10] and Jim Phills (2008) [11] but it adds nuance by looking at how creativity affects participation in socially conscious activities. Furthermore, the exploration adds empirical validation from the arising economic context by concentrating on Bangladeshi university scholars, which enhances the global discussion on social entrepreneurship.

Neneh & Dzomonda, (2024) [12] and Ezeh et al., (2025) [13] found that people who have a high level of social self-efficacy are more likely to be social entrepreneurs because they have the self-assurance to impact society. Similarly, resilience enables social entrepreneurs to navigate difficulties and persevere in their operations, a conception advocated by Ince & Hahn, (2020) [14], Young & Kim (2015) [15] and Cope (2011) [16]. Moreover, entrepreneurial success has been associated with proactive personality qualities, which are defined by self-starting and future-focused conduct [17-19]. Additionally, creating new conceptions to catch societal requisitions is known as social innovation, and it's integral to social entrepreneurship [20-22]. Comprehending such factors serves as crucial for creating interventions and policies that support social entrepreneurship.

While proactive personality and resilience are examples of personal qualities that have been examined in general entrepreneurship, there is still a lack of research on their precise impact on social entrepreneurial goals [23-25]. Further exploration is demanded to understand how these inner constructs uniquely affect the instigation to engage in social entrepreneurship. There have not been substantial investigations on how social self-efficacy affects the sustainability and success rate of social enterprise [26, 27]. Examining this connection may shed light on the ways that social confidence supports efficient management and leadership in socially responsible businesses. Few research has looked at the relationship between proactive personality qualities and social innovation capacities and how it affects social entrepreneurship outcomes [28, 29]. Strategies to improve the efficacy of social entrepreneurship activities could be informed by an understanding of this synergy.

By clarifying how social self-efficacy, social innovation, resilience, and proactive personality shape social entrepreneurial goals, this study advances the area of social entrepreneurship. The analysis offers a sophisticated understanding of the behavioral and psychological determinants of social entrepreneurship by filling in identified research gaps. To improve the effectiveness and sustainability of social ventures, the results can guide the creation of focused interventions and educational initiatives meant to cultivate these qualities in aspiring social entrepreneurs.

Furthermore, this present research seeks to expand the understanding of Jim Phills' (2008) [11] ideas on how social innovation might define social entrepreneurship intention in terms of creativity that propels a person into new ways of undertaking socially purposeful activities. The nature of challenges includes unemployment, social isolation, deterioration of cities and neighborhoods, health inequalities, and sustainable development, which has only intensified the need for active social entrepreneurs who can initiate change [30, 31].

2- Literature Review and Hypothesis Development

A person's motivation to continue and maintain efforts in the field of social entrepreneurship is greatly influenced by their level of social self-efficacy or their belief in their capacity to do so successfully [32]. Bandura (1997) [33] proposed that self-efficacy is grounded in social support, past experiences, skills, and knowledge, and those with high social self-efficacy are more likely to undertake challenges and pursue social change. According to research, people with high social self-efficacy are more likely to start and continue social entrepreneurship because they believe they can benefit from social concerns [34, 35]. Social innovation is how novel ideas, products, or strategies are developed to address complex social and environmental challenges [36]. It involves identifying societal needs and creating unique solutions to address them. Jim Phills (2008) [11] and Jessop et al. (2013) [37] describe social innovation as a key mechanism for social entrepreneurs to achieve sustainable societal impact. Studies indicate that those with a strong propensity toward social innovation are often drawn to social entrepreneurship due to their motivation to drive change and creatively address societal needs [38, 39]. Success in social entrepreneurship requires resilience, which is the capacity to withstand hardships, bounce back from failures, and adjust to changing conditions. Tedeschi & Calhoun (2004) [40] note that

resilient individuals are better equipped to navigate adversity, an invaluable quality in the unpredictable social entrepreneurship landscape. Studies by Branzei & Abdelnour (2010) [41] and Cope (2011) [16] highlight resilience as a core trait that enables social entrepreneurs to persevere through difficult situations, helping them turn setbacks into growth opportunities. Proactivity is a personality that encompasses how an individual approaches tasks, initiation, and identification of opportunities and change pro-action and is a central element in social entrepreneurship [42]. According to Crant (2000) [43], proactive people are better placed to recognize unfilled social needs and find ways to meet them. Regarding social entrepreneurship, proactive self-motivation addresses societal concerns and actively participates in social impact agendas [44, 45]. Numerous studies have examined the impact of social self-efficacy, social innovation, resilience, proactive personality, and the entrepreneurial impulse to engage in social entrepreneurship. The study demonstrates how crucial these elements are in determining the reasons behind individuals' behaviors in the social entrepreneurship field. Confidence and competence are the results of social self-efficacy, problem-solving in the social context is accomplished by social innovation, maintaining effort during rough times is contributed by resilience, and looking for chances is the proactive personality [46]. Taken together, these elements provide an understanding of what influences social entrepreneurship intention and present the foundation for subsequent investigation to analyze these relationships in various settings [47, 48].

2-1-Social Self-Efficacy and Social Entrepreneurship Intention

Social self-efficacy is the conviction that one can successfully manage all the tasks necessary to achieve social change via enterprise [49, 50]. With higher levels of self-efficacy, a favorable correlation between social self-efficacy and social entrepreneurial tendency was discovered [51, 52]. Chen (2015) [53] highlighted that people with enhanced social self-efficacy are always willing to undertake social risks to expand social entrepreneurship. The decision to pursue a career in social entrepreneurship is heavily influenced by an individual's social self-efficacy or confidence in organizing and carrying out acts for social change [54]. Yeh et al. (2020) [55] and Hwee Nga & Shamuganathan (2010) [48] have found that higher social self-efficacy positively correlates with more introspective social entrepreneurial goals. Perceived social competency is improved by high social self-efficacy, which aids social entrepreneurs in identifying problems, obtaining support, and creating novel solutions for the good of society [27]. Social entrepreneurs can use their interpersonal and social talents to identify societal problems, gain support, comprehend conventions, and develop creative solutions. Drawing from existing literature, the subsequent conjecture is put forth:

H1: Social entrepreneurial intention is positively influenced by social self-efficacy.

2-2-Social Innovation and Social Entrepreneurship Intention

Social innovation is developing fresh strategies to address societal problems more effectively [56]. According to [22], social innovation is one of the main factors luring people into social entrepreneurship. A person's chance of participating in social entrepreneurship can be significantly influenced by the desire to effect positive social change and the belief in the effectiveness of original ideas [57, 58]. Before the 19th century, social innovation and entrepreneurship were mostly disregarded, but around 1950, they began to attract attention. More research is required to further understand their relationship and role in addressing social and economic difficulties, particularly in emerging nations. Globalization has expanded opportunities for social enterprises, with social innovation providing practical solutions to societal challenges. According to Fischer et al. (2023) [59], social innovation is a key factor in promoting social entrepreneurship. People are more likely to become highly motivated to engage in social entrepreneurship if they think their ideas are innovative solutions to societal problems. The perceived likelihood of influence increases their drive to employ business pursuits to provide societal value. Innovative solutions are needed to address future challenges and advance sustainable growth [60]. Governments and society are now looking for innovative ways to solve relevant modern issues and promote sustainable well-being due to economic, social, and technical advancements. Additionally, a comprehensive perspective is promoted by social innovation, which modifies power dynamics, practices, resources, and attitudes [61, 62]. Thus, it is possible to propose that:

H2: Social innovation influences social entrepreneurial intentions in a good way.

2-3-Resilience and Social Entrepreneurship Intention

Resilience is the capacity to overcome obstacles and setbacks while maintaining a strong commitment to objectives [63]. According to research Renko et al. (2021) [64] and Duchek (2018) [65], the willingness to engage in social entrepreneurship and resilience are positively correlated. Social entrepreneurs often encounter challenges in pursuing social impact; thus, the ability to endure suffering and triumph over adversity is crucial for success in this field. Additionally, Resilience is helpful for social entrepreneurship since it helps cultural workers resolve demanding social issues [66]. Since resilient people react to risks well, a strong intention to act guarantees that decisions are implemented correctly. On the other hand, individuals with low workplace resilience are more likely to quit early in dangerous opportunities [67]. Conversely, resilience is the ability to work and push on despite contract adversities and failures. Based on the literature, the present study suggests that Resilience has a significant effect on the intention for social

entrepreneurship [68]. Social entrepreneurs must be resolute in the face of many obstacles because resilience improves their capacity to effect change and uphold their objectives, according to the aforementioned arguments.

H3: The intention to launch and run a social business is positively correlated with resilience.

2-4- Proactive Personality and Social Entrepreneurship Intention

Proactivity personality is a description of a person's behavior when it comes to handling tasks and challenges in a proactive self-generated way [69]. The authors Tian et al. (2022) [70] proposed that Proactive personalities are closely associated with social entrepreneurship because they actively identify societal problems and take the initiative to provide solutions, which is central to the concept of social entrepreneurship. A proactive personality means the person approaches the tasks and challenges on his or her initiative [71]. Some of the papers, like Kruse et al. (2021) [72] and Zhao et al. (2010) [73], demonstrate the strong correlation between the desire to pursue social entrepreneurship and a proactive personality. For this reason, proactive persons participate in social opportunity identification and exploitation, which prompts them to think of social entrepreneurship as a tool for transformation [74]. Since people with a proactive attitude actively identify social problems and take the initiative to provide solutions, they are closely associated with social entrepreneurship [75]; it has also been suggested that a proactive personality encourages proactive conduct in people [76]. Thus, Proactive people are more likely to start social businesses because they are skilled at seeing problems in society, coming up with solutions, overseeing scarce resources, inspiring groups, and bringing about meaningful change that will provide long-term social value. Consequently, one may speculate that:

H4: A proactive personality will positively influence social entrepreneurship intention.

In summary of the previous hypotheses, the conceptual framework (Figure 1) for this research might be displayed as follows:

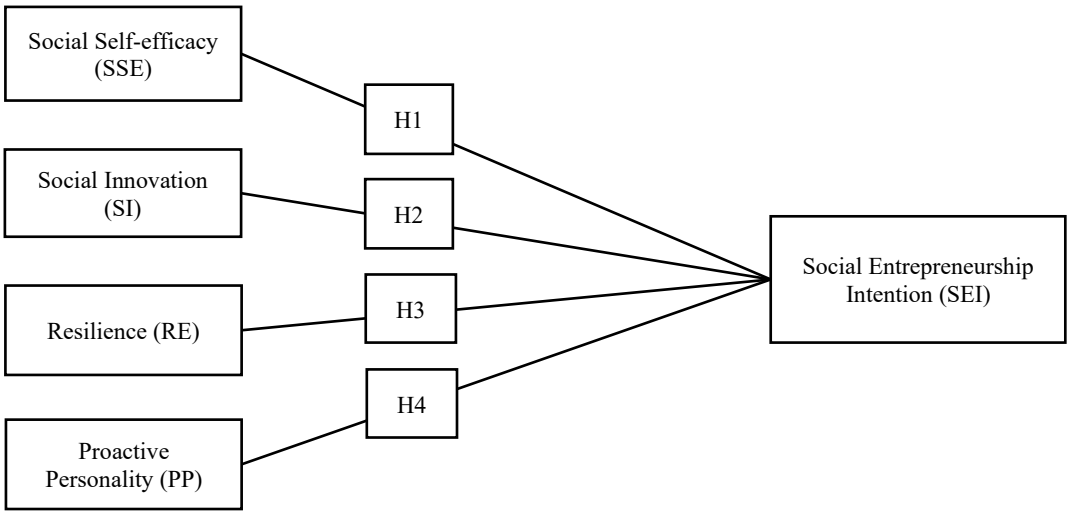

Figure 1. Conceptual Framework (Proposed Model)

3- Research Methodology

3-1- Participants, Sample, and Procedures

This study uses a quantitative research approach to examine the connections between the intention to engage in social entrepreneurship, social self-efficacy, social innovation, resilience, and proactive personality. The intensity and direction of these interactions are measured using a correlational technique, which sheds light on the variables affecting the inclination to engage in social entrepreneurship [77]. The target population is comprised of those interested or involved in social entrepreneurship through work and academic fields such as education, social work, and business. This diversity is important when comparing views and experiences on SE practices and aspirations [78]. To achieve this, data were collected from 540 students from different universities in Bangladesh using a simple random selection procedure, which will be statistically significant to ensure the validity and dependability of the study's conclusion [79]. This number of respondents is sufficient to ensure enough analytical power to the relationships of the variables under study. Electronic administration of a structured questionnaire will be used involving existing scales on social self-efficacy, social innovation, resilience, proactive personality, and intention to pursue social entrepreneurship [47]. People willing to participate in the research are contacted via internet services, social networks, and organizations related to social entrepreneurship with their consent obtained beforehand [80]. A pilot test was carried out with thirty participants from the target population to validate the data collection instrument. The objective of the pilot test is to establish the level of understanding, reliability, and validity of the items on the questionnaire [81].

The results collected from pilot participants are used to determine the presence of any confusion or improvements that could be made to ensure that the final questionnaire measure captures all constructs as intended. Partial Least Squares Structural Equation Modeling (PLS-SEM) is used for data analysis since it is appropriate for exploratory research and can handle complex models with interdependent variables [82]. This analysis will help establish relationships between correlated variables: social self-efficacy, social innovation, resilience, proactive personality, and intention for social entrepreneurship. Moreover, inferential statistics are computed to determine the significance of differences between the participants' demographic attributes. By using such an approach, the study intends to offer important findings on the determinants of social entrepreneurship intention, which would expand the literature on social entrepreneurship.

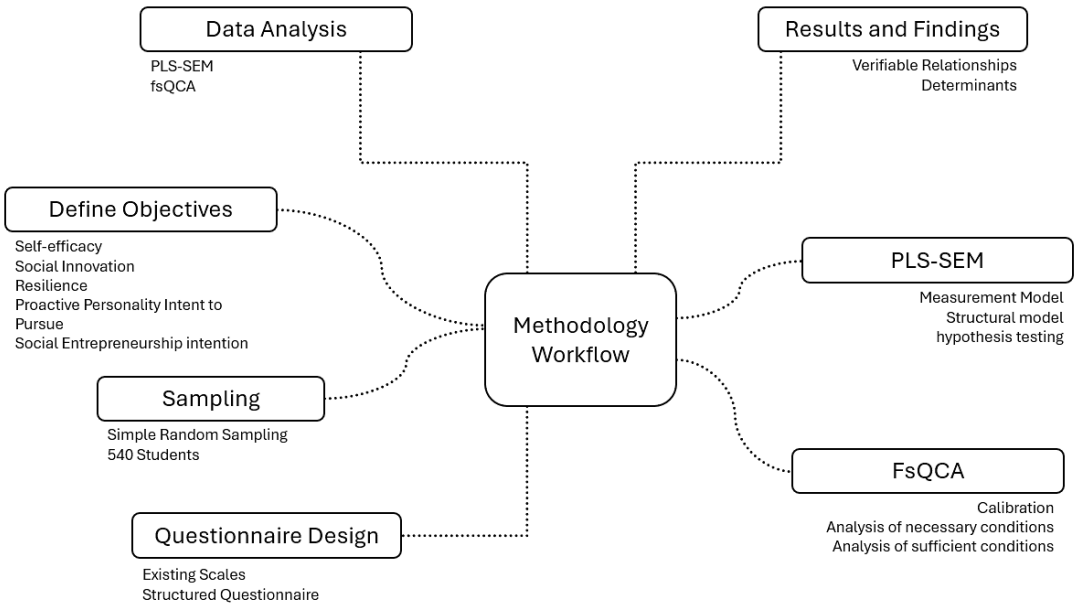

Figure 2. Workflow of Research design

3-2- Measures Descriptive Statistics

A set of items was used in this study to evaluate a particular pertinent construct. These items were selected from several reputable published research studies that were relevant to the investigation. Academic specialists in entrepreneurship and social entrepreneurship examined the questionnaire before data collection to make sure the items were appropriate, relevant, and clear. Each item was measured using a Likert scale ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). The items were improved and modified based on their input to better suit the study's setting. In the end, the questionnaire had 23 items that were taken from various sources and slightly altered to meet the goals of the study.

The four items utilized to measure social self-efficacy were modified by Hossain et al. (2024) [27], which gauges people's confidence in their capacity to successfully negotiate social situations. The measure has been used extensively in social psychology and entrepreneurship studies [33, 83]. John et al. (2024) [3] provided four items that were modified to evaluate social innovation. Numerous research studies on creativity and entrepreneurship have verified this scale. According to Dawson & Daniel, (2010) [84], social innovation is the capacity to create original, long-lasting answers to societal problems. We used the five items developed by Campbell-Sills & Stein, (2007) [85] to measure resilience, which measures an individual's ability to persevere and adjust to hardship. The idea of resilience, which is frequently used in organizational and psychological research to gauge a person's capacity to bounce back from setbacks and keep a positive attitude, was developed by Connor & Davidson (2003) [86]. The five proactive personality items were modified from Bateman & Crant (1993) [45] scale, which is widely used in leadership and entrepreneurial studies to evaluate a person's propensity to take charge and effect change. Five items modified from Zhang et al., (2021) [87], a reputable scale in the literature on entrepreneurship that gauges a person's drive and dedication to starting social businesses [88], were used to measure social entrepreneurial intention.

3-3- Descriptive Statistics

A specific and suitable population for the investigation of social entrepreneurship intentions is defined by the demographic profile of university students used in this study (Table 1). All respondents are 18 to 27 years old, with a notable distribution across the younger age groups: 29.6% are from 18 to 21 years, 33.3% from 22 to 24 years, and 37.0% from 25 to 27 years. This demographic distribution means that the people represented are young, vibrant, and

can be untamed in their methods for addressing social concerns. Age: Gender distribution is slightly skewed towards the females at 53.7% while males are at 46.3%. It benefits in terms of drawing gender-diverse insights and motivations toward social entrepreneurship at large. Concerning the level of education, most of the respondents are working toward their Bachelor's degree, 70,4% of the total; this reflects the fact that all participants are still at the initial phase of the education process. 29.6% of the respondents are in the process of Masters and thereby, are at the higher level of their courses and may have a higher concern to transformative social justice. The data demonstrates that most participants are engaged in Business/Management (40.7%) and Social Sciences (33.3%), which are also topics related to the themes of social entrepreneurship. The respondents mainly sourced from urban backgrounds (74.1%), which may imply better prospects, human capital, and networks to support innovative venture formation. Surprisingly, the participants had prior experience in social entrepreneurship, as was revealed by 50.0% of the students, and this would provide the impetus for the practice and execution of new social activities.

Table 1. Summary of Respondent's Demographic Profiles

Demographic Variable	Category	Frequency	Percentage (%)
Age	18-21 years	160	29.6
	22-24 years	180	33.3
	25-27 years	200	37.0
Gender	Male	250	46.3
	Female	290	53.7
Education Level	Bachelor's Degree	380	70.4
	Master's Degree	160	29.6
Field of Study	Business/Management	220	40.7
	Social Sciences	180	33.3
	Engineering/Technology	60	11.1
	Education	50	9.3
	Health Sciences	30	5.6
Geographic Location	Urban	400	74.1
	Suburban	80	14.8
	Rural	60	11.1
Previous Experience in Social Entrepreneurship	Yes	270	50.0
	No	270	50.0

4- Results

4-1- PLS-SEM Results

The PLS-SEM measures the measurement and structural model to test the proposed hypotheses in this study. Composite reliability (CR) and average variance extracted (AVE) are utilized to characterize the constructs' convergent validity and internal consistency, and they all show moderate to high reliability and validity (detailed in Table 2). Internal consistency is assessed by CR, using values above 0.70 of a construct to consider a construct as reliable [89]. In the case of social self-efficacy (SSE), the Cronbach alpha value was 0.893, which is a high internal consistency as all items have concurrent validity ranging from 0.783 to 0.850. The social innovation (SI) construct also had satisfying reliability with a CR of 0.905, and all items had loading values between 0.816 and 0.851, proving the internal consistency. Likewise, the needed construct, resilience (RE), provides an internal consistency estimate in line with RR expectations, with a CR of 0.927 and RE loadings of 0.806 0.875. Still, PP2, which has a lower loading of 0.623, provides input towards the reliability of the construct. The SEI measurement model's internal consistency is just as acceptable as the convergent validity measurement and all the item loadings were found to be high, ranging between 0.741 and 0.848, with a CR of 0.905.

Convergent validity, which AVE measures, should be greater than or equal to 0.50 to ensure a construct for a fair amount of variation in measuring its indicators [90]. Social self-efficacy also confirms high convergent validity based on the estimated average variance extracted value of 0.677, suggesting that the construct provides a reasonable estimate, outlining 67.7% of the variance in its items. This analysis also points towards good convergent validity for social innovation with an AVE of 0.705. Similarly, Reliability and SEI present the AVE of 0.717 and 0.655, respectively, to ensure that both of these constructs cover enough variance to their respective items. Proactive personality is found to have an AVE of 0.62, which, although lower for the second item of PP2, is above the threshold of 0.5 required for convergent validity. In total, the results show high internal consistencies and furthermore high convergent validities which proves that the measurement model is sound and that all items fit their respective construct.

Table 2. Assessment of Internal Consistency and Convergent Validity

Constructs	Item	Loadings	CR	AVE
Social Self-efficacy	SSE1	0.822	0.893	0.677
	SSE2	0.850		
	SSE3	0.835		
	SSE4	0.783		
Social Innovation	SI1	0.851	0.905	0.705
	SI2	0.848		
	SI3	0.842		
	SI4	0.816		
Resilience	RE1	0.806	0.927	0.717
	RE2	0.875		
	RE3	0.836		
	RE4	0.873		
	RE5	0.843		
Proactive Personality	PP1	0.808	0.890	0.620
	PP2	0.623		
	PP3	0.826		
	PP4	0.839		
	PP5	0.820		
Social Entrepreneurial Intention	SEI1	0.741	0.905	0.655
	SEI2	0.801		
	SEI3	0.839		
	SEI4	0.816		
	SEI5	0.848		

Table 3. Discriminant Validity

Constructs	PP	RE	SEI	SI	SSE
PP	0.787				
RE	0.480	0.847			
SEI	0.578	0.612	0.810		
SI	0.446	0.660	0.582	0.840	
SSE	0.403	0.500	0.513	0.693	0.823

Note: The Square Root of the AVE and Correlation Coefficient

Discriminant validity (Table 3), in line with Fornell & Lsarcker (1981) [90], also checks that each construct is unique to those in the model; therefore, one construct possesses a higher commonality with its measures than any of the other constructs. According to this criterion, the square root of the AVE of each construct should be greater than the coefficients of the related construct. The diagonal of the table, as presented on the webpage, contains the square root of the AVE for each construct. Values presented in the off-diagonal boxes represent the correlation between two constructs. For proactive personality (PP), the square root of the AVE is 0.787, which exceeds its correlations with other constructs. The means obtained were as follows: resilience (RE) = 0.48, social entrepreneurial intention (SEI) = 0.578, social innovation (SI) = 0.446 and social self-efficacy (SSE) = 0.403. This suggests that PP is discriminant from these other constructs. Likewise, the square root of AVE of resilience (RE) is 0.847, which is greater than the value of PP (0.48), SEI (0.612), SI (0.66), and SSE (0.5), which validates the study that RE is different from those constructs. For social entrepreneurial intention (SEI), the value of the construct reliability is lower than its AVE, 0.81, and greater than its correlations with PP (0.578), RE (0.612), SI (0.582), and SSE (0.513), confirming discriminant validity for SEI. Social innovation (SI) also has discriminant validity and a square root of AVE greater than SI with PP (0.446), RE (0.66), SEI (0.582), and SSE (0.693). Lastly, for social self-efficacy (SSE), the value of the square root of AVE is 0.823. Thus, it is higher than the value of PP (0.403), RE (0.5), SEI (0.513), and SI (0.693). These results prove that all the constructs satisfy the discriminant validity Fornell-Larcker criterion as the diagonal elements of the AVE are more significant than the off-diagonal elements of the cross-loading. This implies that the various constructs capture different aspects of the model and are indeed adequately different from each other to warrant the reliability of the measurement model (Figure 3).

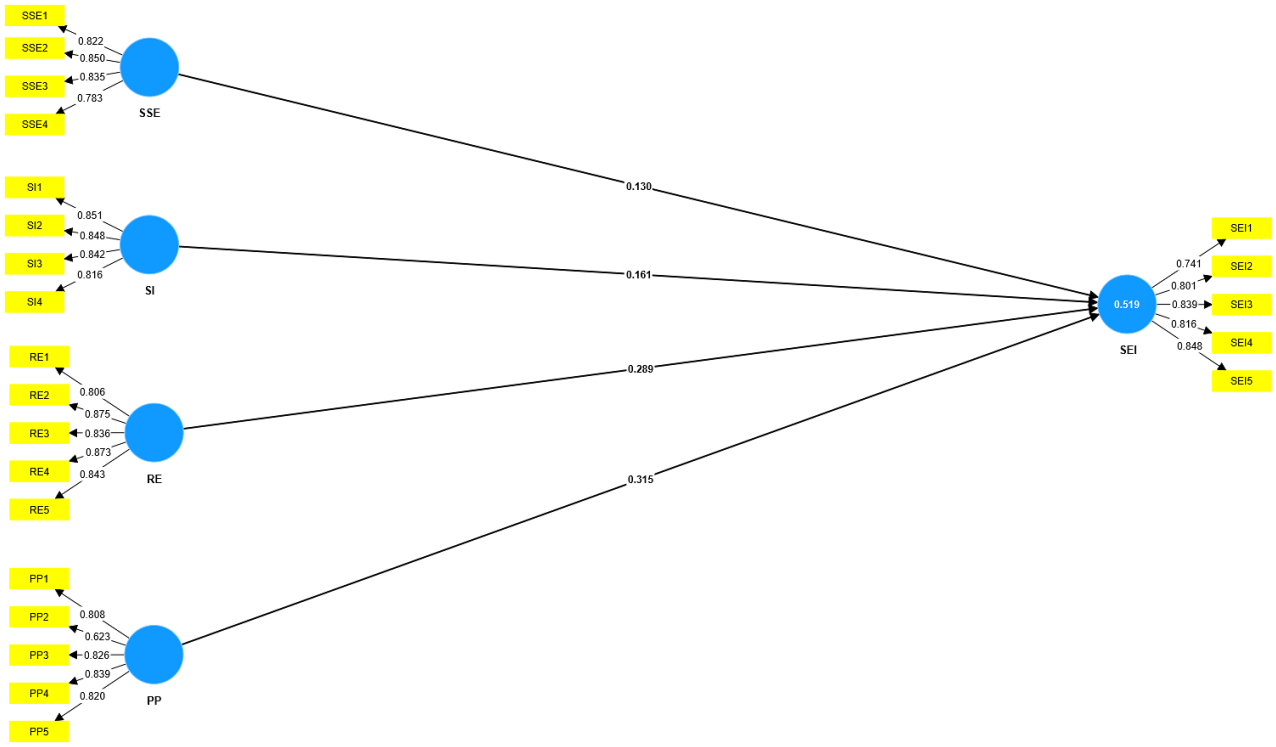

Figure 3. Measurement Model

4-1-1- Hypothesis Analysis

As depicted in the structural model and the respective path coefficients, t-values, and p-values prove all the hypothesized relationships between the constructs and the social entrepreneurial intention (SEI). Hypothesis one proposed that proactive personality (PP) positively impacts SEI, and findings provided robust support, $\lambda = 0.317$, $t = 6.621$, $p = 0.000$. This indicates a high and positive relationship between PP and SEI, thereby accounting for 15.1% of effect size (f^2), contributing to the explanation of SEI variance equal to 51.9% (R^2). The amount of total variance captured in the model, as shown by the $Q^2 = 0.505$, reveals the predictive capability of PP to explain SEI well (Hair et al., 2019). The second hypothesis (H2) set the positive relationship between the resilience (RE) and SEI and the given path coefficient is 0.291, more significant than the cut-off t-statistic value of 1.96 with a t-statistic value of 5.019 and p-value of 0.000. At the same time, the RE analyses provide a valuable contribution toward SEI with $f^2 = 0.091$, supporting once again the function of resilience on social entrepreneurial intentions.

Likewise, the results of the structural model provide empirical evidence for the third hypothesis (H3) that relates to the linkage between social innovation (SI) and social enterprise innovation (SEI) with a path coefficient of 0.161, $t = 2.565$, and $p < 0.01$. While the f^2 value is smaller for SI (.021) compared to PP and RE it plays a positive role in SEI. Lastly, the fourth hypothesis (H4) reveals that social self-efficacy (SSE) has a direct positive impact on SEI with a partial coefficient of 0.129; $t = 2.823$ and $p \leq 0.05$. SSE has a moderate effect size ($f^2 = 0.018$) but is still significant, indicating that confidence in one's social ability increases social entrepreneurial intentions. The predictor variables account for 51.9% of the variance in SEI, therefore RE, SI, PP, and SSE are useful in determining intentions to engage in social entrepreneurship. All the details of the structural model assessment are given in Table 4 and the pictorial view of the relationship among variables are shown in Figure 4.

Table 4. Structural Model Results (Hypothesized Relationships)

Hypothesis	Path Relationships			Path Coefficient	SD Error	t-value	P-Values	Decision	R^2	f^2	Q^2
H1	SEI	←	PP	0.317	0.048	6.621	0.000	Supported	0.519	0.151	0.505
H2	SEI	←	RE	0.291	0.058	5.019	0.000	Supported		0.091	
H3	SEI	←	SI	0.161	0.063	2.565	0.010	Supported		0.021	
H4	SEI	←	SSE	0.129	0.046	2.823	0.005	Supported		0.018	

Note: Coefficients of Determination (R^2), Substantial Effect Size (f^2), and Predictive Relevance (Q^2)

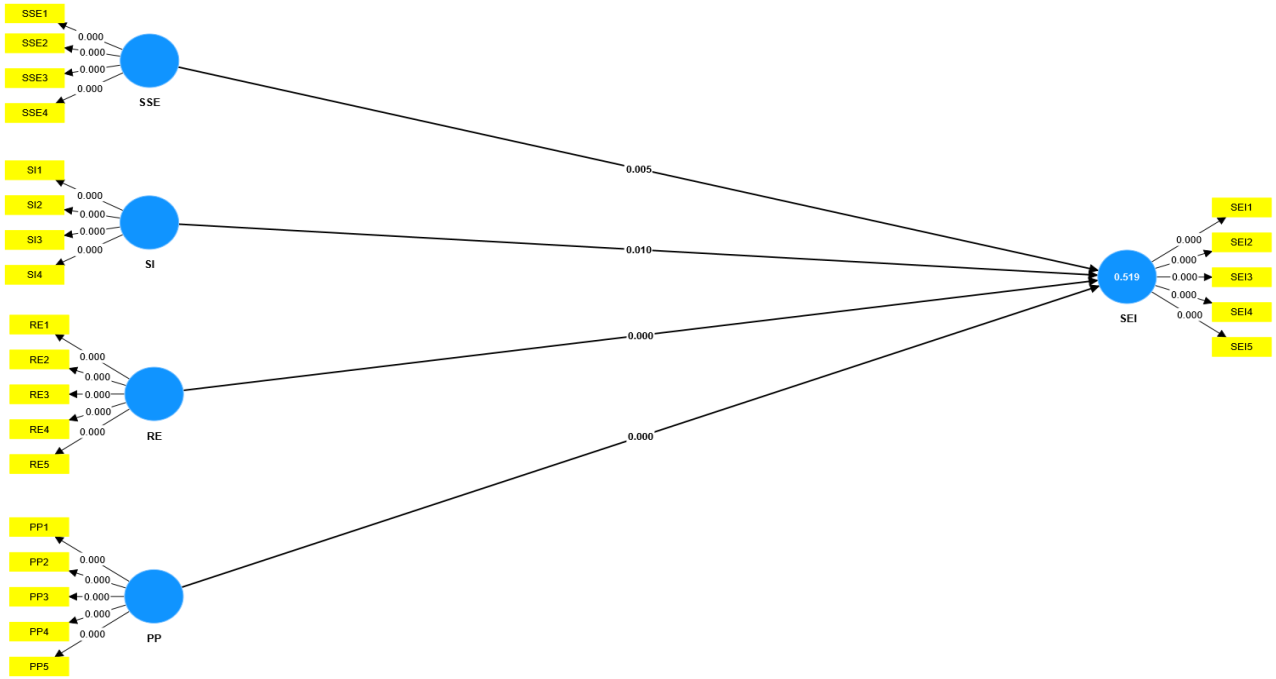

Figure 4. Structural Model

4-2- The Result of fsQCA Analysis

FsQCA is a methodology that offers a set of techniques to decode the intricate relationship between causal factors and their influence on outcomes, indicating how diverse combinations can lead to similar results [91]. This study's causal conditions are the combinations of social self-efficacy, social innovation, resilience, and proactive personality needed to inspect how the particular outcome addresses social entrepreneurial intention. However, some necessary steps are required to get an in-depth fsQCA result, which is elaborated on in the next section. Starting with calibration, FsQCA will analyze causal conditions and determine the necessary conditions for our outcome [92].

4-2-1- Calibration Process

The primary need for the fsQCA interpretation is the calibration process that can transform any data into fuzzy variables by rescaling through a binary set of memberships [93]. The calibration process provides a full membership set involving a 90% percentile, whereas the 50% percentile denotes a moderate level of agreement, named the cross-over point. Lastly, the 10% percentile symbolizes non-membership, indicating binary responses placed near outside the set (Table 5). This process enhances fsQCA's ability to analyze causal conditions that differ from its typical binary presence form; instead, it uses pre-determined fuzzy-set membership scores that are essential for determining qualitative breakpoints [94].

Table 5. Data Calibration for Fuzzy Set Membership Levels

Causal Construct	Full Membership (90%)	Cross Over Membership (50%)	Non-Membership (10%)
Social Self-efficacy (SSE)	7.00	5.00	4.00
Social Innovation (SI)	6.00	5.00	3.00
Resilience (RE)	6.00	5.00	3.00
Proactive Personality (PP)	6.00	5.00	3.00
Social Entrepreneurial Intention	7.00	5.50	2.50

4-2-2- NCA Analysis

Among the many benefits of fsQCA, we cannot ignore its dual criteria to evaluate the causal conditions' influence on the selected outcome by giving the results of both consistency and coverage from its necessary analysis [95]. As per [96], a condition must meet a minimum value of 0.8 on the consistency score to be considered a necessary construct for this study. The construct can be revamped to be considered an almost or always necessary construct by reaching the value of 0.9 on the consistency score. A higher consistency value (exceeding 0.75) will indicate that a configuration can be strongly linked to the outcome [97]. From Table 6, any of the constructs did not reach the required minimum score of 0.8. However, we will witness their contribution in the following analysis (Figures 5 and 6).

Table 6. NCA Results via fsQCA

Constructs	High SEI		~Low SEI	
	Consistency	Coverage	Consistency	Coverage
SSE	0.728	0.744	0.766	0.750
~ SSE	0.520	0.476	0.466	0.509
SI	0.702	0.613	0.586	0.678
~ SI	0.589	0.637	0.586	0.678
RES	0.677	0.611	0.669	0.645
~ RES	0.607	0.632	0.597	0.664
PP	0.626	0.601	0.637	0.654
~ PP	0.639	0.622	0.611	0.636

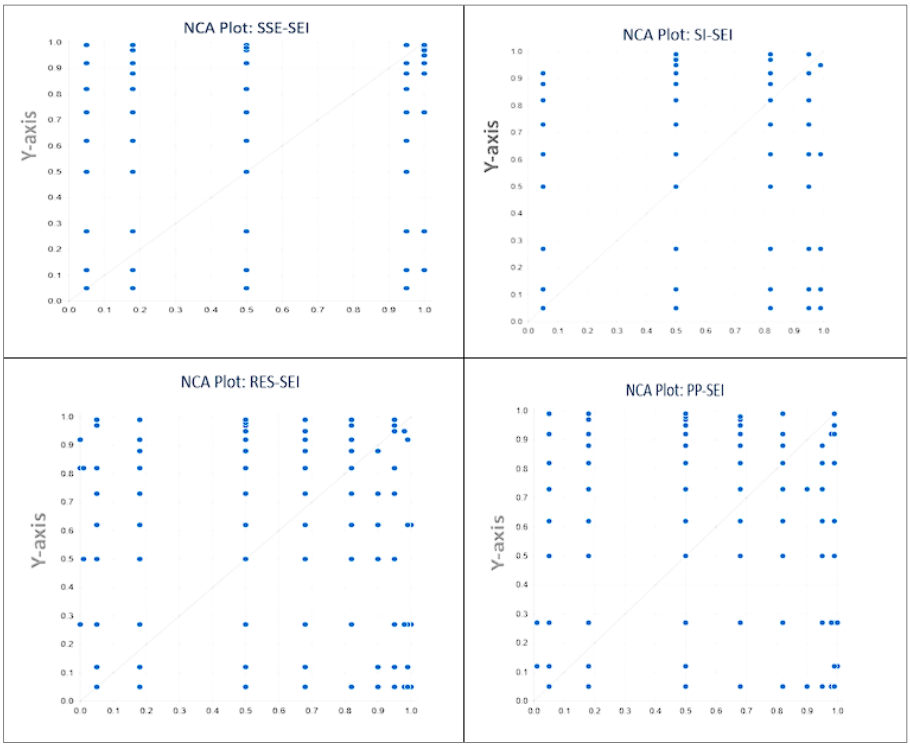

Figure 5. NCA plots for high level of predicting SEI

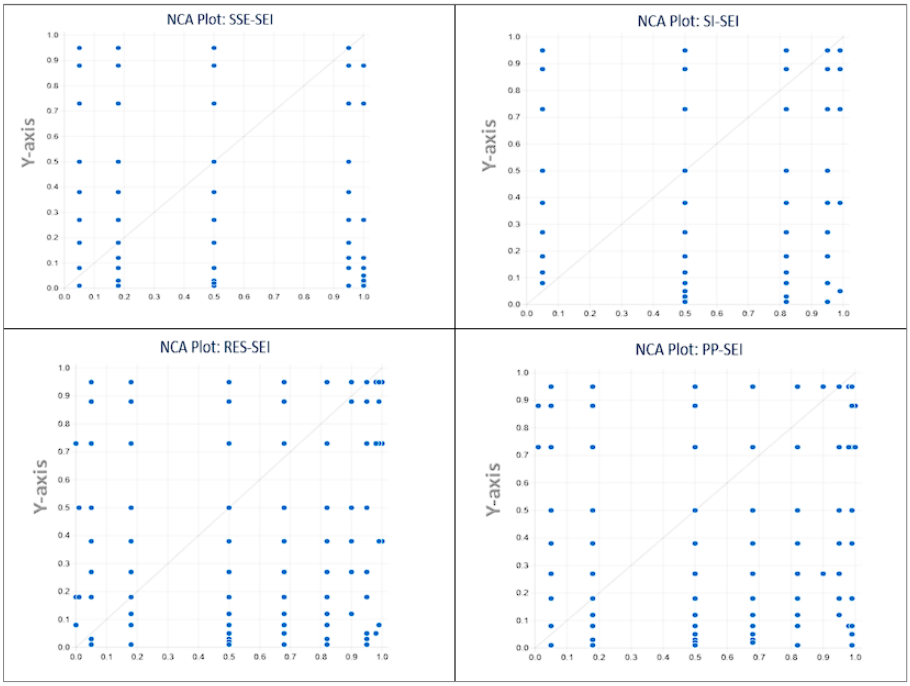

Figure 6. NCA plots for low level of predicting SEI via fsQCA

4-2-3- Sufficient Configuration Analysis

Tables 7 and 8 show the final analysis of fsQCA, which involved both high and low levels of the outcome gain technique. We will analyze the value of raw coverage and consistency to find the best possible solution to uplift or decrease the outcome of social entrepreneurial intention.

Table 7. Sufficient analysis for predicting high level of SEI

Configurational Constructs SEI = f (SSE, PO, RES, PP)	Solutions for a high level of SEI			
	Solution			
	1	2	3	4
Social Self-efficacy	●	●	●	●
Social Innovation	●	●	⊗	•
Resilience		⊗	●	⊗
Proactive Personality	⊗		●	⊗
Raw Coverage	0.516	0.531	0.572	0.445
Unique Coverage	0.017	0.020	0.049	0.645
Consistency	0.809	0.807	0.800	0.800
Overall Solution Coverage	0.630			
Overall Solution Consistency	0.800			

Note: Black circle (●) indicate the presence of a condition, and Negation circle (⊗) indicate its absence. Large circles indicate core conditions; small ones, peripheral conditions. Blank spaces indicate "don't care".

Table 8. Sufficient analysis for predicting low level of SEI

Configurational Constructs ~ SEI = f (SSE, PO, RES, PP)	Solutions for a low level of SEI			
	Solution			
	1	2	3	4
Social Self-efficacy	⊗	⊗	⊗	⊗
Social Innovation	•	⊗	⊗	⊗
Resilience	⊗	●		
Proactive Personality			●	•
Raw Coverage	0.750	0.231	0.268	0.231
Unique Coverage	0.750	0.005	0.005	0.034
Consistency	0.827	0.806	0.800	0.834
Overall Solution Coverage	0.750			
Overall Solution Consistency	0.802			

Note: The black circle (●) indicates the presence of a condition, and the Negation circle (⊗) indicates its absence. Large circles indicate core conditions; small ones, peripheral conditions. Blank spaces indicate "don't care".

Raw coverage value measures the relevance of the configuration related to real-life contribution. In contrast, high raw coverage with low consistency scores will indicate prevalent configurations but not reliably causal in producing the outcome [97]. However, solutions 1 and 2 of Table 6 have almost the same raw coverage with required consistency scores to contribute to increased social entrepreneurial intention. Both solutions state that the presence of social self-efficacy and social innovation are a must. Nevertheless, the 3rd solution combines almost all the chosen constructs and brings out the highest possible raw coverage, simulating the real-life contribution. It informs us to blend the three constructs- social self-efficacy, resilience, and proactive personality- to achieve a higher outcome for social entrepreneurial intention.

Table 8 shows the combination that can reduce the effect of social entrepreneurial intention. Among the four solutions, the first has the highest raw coverage and consistency score. It warns us that the absence of social self-efficacy and resilience, combined with the parsimonious presence of social innovation, which has a raw coverage score of 0.75 and a consistency score of 0.827, will bring down the efficacy of social entrepreneurial intention, which is not an avoidable case. However, the raw coverage value of the rest of the solution can be negligible because of the poor scores.

5- Discussion

In emerging countries like Bangladesh, this research primarily looks at the justification for early-stage social entrepreneurial intents to address certain social challenges or start social transformation. Two research challenges were intended to be addressed by this study. The first goal is to identify the psychological characteristics—social self-efficacy, social innovation, resilience, and proactive personality—that have significant roles in university students' intentions to participate in social entrepreneurship in emerging economies. The second goal is to investigate how these variables are associated with the university students' intentions to do so. Partial Least Squares Structural Equation Modeling (PLS-SEM) and fuzzy-set qualitative comparative analysis (fsQCA) are combined in this work to investigate the variables influencing social entrepreneurial intention (SEI). Strong insights into how social self-efficacy, social innovation, resilience, and proactive personality shape SEI are offered by the findings.

According to the findings, the results show a minor impact size ($f2 = 0.018$) and a positive relationship between social self-efficacy (SSE) and SEI ($\beta = 0.129$, $t = 2.823$, $p = 0.005$). This finding is consistent with earlier research highlighting the role that self-efficacy plays in entrepreneurial behavior [98]. According to Bandura (1997) [33], self-efficacy theory, people who have a strong sense of their own talents are more inclined to take on difficult undertakings, such as social entrepreneurship [99]. Interventions to improve social self-efficacy in entrepreneurial education are crucial because social entrepreneurs need to have faith in their capacity to organize resources, create networks, and address social issues [51, 100].

The findings indicate that, with an effect size of $f2 = 0.021$, social innovation (SI) has a substantial impact on SEI ($\beta = 0.161$, $t = 2.565$, $p = 0.010$). According to Phillips et al. (2015) [29], social innovation is widely acknowledged as a catalyst for social entrepreneurship since it empowers businesspeople to create innovative answers to societal problems. Previous studies show that to optimize social effects, social entrepreneurs use creative business structures [101]. According to van der Have & Rubalcaba (2016) [102], this study demonstrates that encouraging an innovation-driven attitude is crucial for advancing social entrepreneurship, especially in settings where conventional commercial solutions are inadequate.

The impact of resilience (RE) on SEI is significant and strong ($\beta = 0.291$, $t = 5.019$, $p < 0.001$), with an effect size of $f2 = 0.091$. This result aligns with earlier studies that highlight resilience's importance in entrepreneurship success [103]. Particularly crucial in the unpredictable world of social entrepreneurship, resilient people persevere in the face of challenges and disappointments [104]. The research backs up the idea that resilience increases adaptation and problem-solving skills while encouraging sustained dedication to social endeavors [105]. These results imply that social entrepreneurship may benefit greatly from resilience-building initiatives.

With a significant impact size ($f2 = 0.151$), a proactive personality (PP) is the best predictor of SEI ($\beta = 0.317$, $t = 6.621$, $p < 0.001$). This finding is consistent with other research that found proactive people are more likely to spot possibilities, take charge, and bring about change in social enterprises [106, 107]. Proactive businesspeople foresee future problems and take action to develop impact-driven solutions rather than waiting for outside stimuli [108]. This implies that social entrepreneurial aspirations can be greatly increased by encouraging proactive activity through educational and training initiatives [109].

Strong explanatory power is demonstrated by the model's ability to explain a significant portion of the SEI variation ($R^2 = 0.519$). The findings' robustness is further supported by the predictive relevance ($Q^2 = 0.505$). While the fsQCA technique supports the combinatory impacts of these attributes in influencing social entrepreneurial goals, the PLS-SEM results emphasize the individual impact of each feature. These results highlight the necessity of thorough training programs that foster aspiring social entrepreneurs' social self-efficacy, resilience, creativity, and proactive conduct.

6- Implication and Conclusion

6-1- Theoretical Implications

This research makes several contributions to the theory of social entrepreneurs. Principally, the study contributes to existing entrepreneurial theories by elucidating the framework of social innovation through components of leadership and psychology by discussing associations among leadership orientation, proactive personality, social self-efficacy, resilience, and social innovation. Hence, hybridizing conventional and innovative entrepreneurs' personality profiles allows for a more nuanced understanding of factors influencing social entrepreneurial intentions. This highlights the need for traditional entrepreneurial theories to shift toward more contextualized features that align with their social relevance. Furthermore, the strong relationships in the present study demonstrate the need for a multidisciplinary approach to social entrepreneurship based on findings in psychology, management, and social sciences. This approach helps scholars advance a more profound perspective where they can include new entrepreneurs' emotions and social states in their frameworks. In future studies, more stimuli concerning the relations between these characteristics and the behavior of new entrepreneurs in certain contexts are expected to be brought forward.

6-2- Practical Implications

The application of these findings is valuable for educators, policymakers, and organizations that seek to encourage social entrepreneurship among university learners. There is a need to have educational, curriculum, and training programs that should encourage leadership skills, proactive personality characteristics, and social self-efficacies. Learning forums such as workshops, seminars, and practical case scenarios expose students to opportunities that prepare them to handle social issues in flexible and efficient ways that a university can provide. Moreover, enriching and developing one's extracurricular activities mentioning the option of creating spaces where students work on social entrepreneurship ventures, can be also valuable for the practical experience while at the same time encouraging teamwork, creativity, and tenacity. Regarding the supportive frameworks, the policymakers should also ensure the availability of resource opportunities for future social entrepreneurs comprising funding, mentorship, and networking that links students with the expertise of experienced professionals. Moreover, organizations can play million-dollar roles by increasing awareness among people about social responsibilities and the importance of social entrepreneurship, can popularize successful cases, models and share the resources of such social entrepreneurial ventures that will enrich, motivate, and encourage a large number of people for supporting the social entrepreneurial activities towards innovation. These schemes in unison can foster the generation of a dynamic environment that not only inspires social entrepreneurship but also ensures that future generations want to improve society's welfare by solving the complex problems that they face. According to current advancements in social entrepreneurship education, transdisciplinary learning, practical training, and institutional support are becoming more and more crucial to promoting social entrepreneurial aims. To give students from a variety of academic backgrounds the entrepreneurial skills they need, universities are progressively combining commercial tactics, technological innovation, and social impact frameworks. Incubators, hackathons, and community-driven initiatives are examples of experiential learning opportunities that are becoming crucial for fostering resilience, leadership, and proactive problem-solving. Additionally, organizations and lawmakers are bolstering support networks through funding opportunities, mentorship programs, and networking platforms to provide aspiring social entrepreneurs with the resources and information needed to effect meaningful social change.

7- Conclusion

This study extends the discourse on social entrepreneurship by exploring the on-leadership orientation, proactive personality, and social entrepreneurship intention (SEI) among Bangladeshi university students. The studies in this section demonstrated that proactive personality had a significant positive correlation with SEI, indicating that proactive students are likely to pursue social entrepreneurship careers. In addition, leadership orientation was verified to have a positive relationship with SEI, which means that students with leadership predisposition are potential SE candidates. Thus, to prepare a variety of social entrepreneurial spirits, students in Bangladesh must cultivate not only task and relationship orientations in leadership but also a proactive personality. This can be in the form of morale boosting, creating awareness of social responsibilities, and discarding and encouraging participation in co-curricular activities. In addition, the literature review points out the roles of social self-efficacy, social innovation, resilience, and proactive personality in determining personality disposition for engaging in social entrepreneurship. As more individuals strive for meaningful professions that contribute to social advancement, insights into these motives behind social entrepreneurship have grown more imperative. Together, social self-efficacy and proactive personality enable an individual to address social difficulties and frame innovative responses to them. At the same time, resilience provides the capability to withstand setbacks and pursue opportunities when confronted with obstacles. This interplay of factors affects individuals' desires to become social entrepreneurs. To cultivate social entrepreneurs, policymakers and organizations should implement programs that encourage these qualities, help emerging social entrepreneurs feel the environment, and support the conditions needed to create those conditions. This would allow us to prepare a new generation of socially conscious leaders to use creative companies to address today's social issues.

7-1- Limitations and Future Research

This research work also has its limitations that the study recognizes may affect the generality and the richness of the conclusions. First, although the study incorporated both male and female participants, it was silent on the gender differences in social entrepreneurship intention and behavior. Subsequent research could examine how gender affects social entrepreneurial ventures' reason, barriers, and effectiveness, yielding a richer understanding of this relationship. Further, while the sample size of this study was relatively large enough to afford some exploratory analysis, the sample herein represented only a proportion of Bangladeshi university students. By having a bigger and more heterogeneous population sampled, the results would be more generalizable, and the decision-makers would better understand the impacts of different segments on social entrepreneurship intentions.

To expand on the current study, several potential directions for future research should be considered. The transition from the idea to the establishment of actual social companies is another field of study that appears to be underdeveloped. It may be more useful to follow students chronologically, throughout their educational levels, to find out how many of

them engage in social entrepreneurship, how they meet the challenges of this path, and the existing helpful networks. Also, the model will be proposed where the influence of contextual factors – cultural, economic, and institution-based factors that form the basis of social entrepreneurship intentions- would meaningfully contribute to understanding the environment within which social ventures in Bangladesh operate. Recording more open-ended data through surveys and other methods like interviews or focus group discussions could also give more vibrant and personalized accounts concerning the experience of those aspiring to venture into social entrepreneurship. Collectively these directions can further elaborate on the nature and complex interrelationships determining social entrepreneurship and inform specific measures to promote future SEs.

Even though the study used a straightforward random sampling process and a pilot test to guarantee the validity and reliability of the questionnaire, biases like self-selection bias might still exist because participants were contacted through social media and internet services, which might favor those who were more active online. To ensure a more representative and balanced dataset, these biases are lessened by the use of validated scales and varied representation across academic subjects.

Although the study offers insightful information about encouraging social entrepreneurs, socioeconomic and cultural variables may limit the applicability of its suggestions in Bangladesh. Entrepreneurial risk-taking is frequently discouraged by a lack of structured mentorship programs, restricted finance options, and risk-averse social norms, especially in social businesses. Furthermore, Bangladesh's traditional educational institutions place more emphasis on theoretical information than on interdisciplinary, experience learning, which prevents pupils from developing resilient and proactive personality traits. If these structural obstacles are not removed, localized training frameworks, context-specific legislative measures, and more robust institutional support may be needed to adapt international models of social entrepreneurship education to the nation's own economic and cultural environment.

8- Declarations

8-1- Author Contributions

Conceptualization, R.S. and B.U.; methodology, R.S., M.R., and MFI.; software, M.R. and S.K.; validation, M.N., S.P.C, and B.U.; formal analysis, M.R., M.F.I., and S.K.; investigation, Y.R., S.P.C., and M.R.; resources, R.S., S.K., and Y.R.; data curation, R.S., B.U., and S.K.; writing—original draft preparation, R.S, M.R., and B.U.; writing—review and editing, M.F.I. and B.U.; visualization, S.P.C. and M.R.; supervision, M.F.I. and B.U.; project administration, M.F.I. and S.K.; funding acquisition, M.F.I. All authors have read and agreed to the published version of the manuscript.

8-2- Data Availability Statement

The data presented in this study are available in the article.

8-3- Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

8-4- Institutional Review Board Statement

Not applicable.

8-5- Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

8-6- Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

9- References

[1] Mthembu, A., & Barnard, B. (2019). Social Entrepreneurship: Objectives, Innovation, Implementation and Impact on Entrepreneurship. SSRN Electronic Journal, 1-43. doi:10.2139/ssrn.3343448.

[2] Watson, T. J. (2013). Entrepreneurship in action: Bringing together the individual, organizational and institutional dimensions of entrepreneurial action. Entrepreneurship and Regional Development, 25(5–6), 404–422. doi:10.1080/08985626.2012.754645.

[3] John, A., Selvaraj, V., & Jisham, M. (2024). Catalysts of social change and innovation: Mediating role of social self-efficacy and social support on social entrepreneurial intentions. African Journal of Science, Technology, Innovation and Development. doi:10.1080/20421338.2024.2393734.

[4] Bacq, S., & Alt, E. (2018). Feeling capable and valued: A prosocial perspective on the link between empathy and social entrepreneurial intentions. Journal of Business Venturing, 33(3), 333–350. doi:10.1016/j.jbusvent.2018.01.004.

[5] London, M. (2010). Understanding social advocacy: An integrative model of motivation, strategy, and persistence in support of corporate social responsibility and social entrepreneurship. Journal of Management Development, 29(3), 224–245. doi:10.1108/02621711011025768.

[6] Ebrashi, R. El. (2013). Social entrepreneurship theory and sustainable social impact. Social Responsibility Journal, 9(2), 188–209. doi:10.1108/SRJ-07-2011-0013.

[7] Liu, X., Lin, C., Zhao, G., & Zhao, D. (2019). Research on the effects of entrepreneurial education and entrepreneurial self-efficacy on college students' entrepreneurial intention. Frontiers in Psychology, 10(Apr), 00869. doi:10.3389/fpsyg.2019.00869.

[8] Nowiński, W., Haddoud, M. Y., Lančarič, D., Egerová, D., & Czeglédi, C. (2019). The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries. Studies in Higher Education, 44(2), 361–379. doi:10.1080/03075079.2017.1365359.

[9] Lumpkin, G. T., Moss, T. W., Gras, D. M., Kato, S., & Amezcua, A. S. (2013). Entrepreneurial processes in social contexts: How are they different, if at all? Small Business Economics, 40(3), 761–783. doi:10.1007/s11187-011-9399-3.

[10] Duncan-Horner, E. M., Farrelly, M. A., & Rogers, B. C. (2022). Understanding the social entrepreneur: a new intentions model for advancing equity, social justice and sustainability. Journal of Entrepreneurship in Emerging Economies, 14(3), 361–391. doi:10.1108/JEEE-10-2020-0359.

[11] Phills, J. A., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering social innovation. Center for Social Innovation. Stanford Social Innovation Review, 12–13. doi:10.48558/GBJY-GJ47.

[12] Neneh, B. N., & Dzomonda, O. (2024). Transitioning from entrepreneurial intention to actual behaviour: The role of commitment and locus of control. International Journal of Management Education, 22(2). doi:10.1016/j.ijme.2024.100964.

[13] Ezeh, P. C., Nkamnebe, A. D., & Nkamnebe, O. E. (2025). Entrepreneurial intentions among academics in Nigeria: The mediating role of self-efficacy. Journal of the International Council for Small Business. doi:10.1080/26437015.2024.2442404.

[14] Ince, I., & Hahn, R. (2020). How dynamic capabilities facilitate the survivability of social enterprises: A qualitative analysis of sensing and seizing capacities. Journal of Small Business Management, 58(6), 1256–1290. doi:10.1111/jsbm.12487.

[15] Young, D. R., & Kim, C. (2015). Can social enterprises remain sustainable and mission-focused? Applying resiliency theory. Social Enterprise Journal, 11(3), 233–259. doi:10.1108/sej-02-2015-0005.

[16] Cope, J. (2011). Entrepreneurial learning from failure: An interpretative phenomenological analysis. Journal of Business Venturing, 26(6), 604–623. doi:10.1016/j.jbusvent.2010.06.002.

[17] Xu, F., Hsu, C., Wang, T., & Lowry, P. B. (2024). The antecedents of employees' proactive information security behaviour: The perspective of proactive motivation. Information Systems Journal, 34(4), 1144–1174. doi:10.1111/isj.12488.

[18] Ślebarska, K., Stremska, A., & Kowalski, G. (2023). Managing effective labor market entry: proactive coping and self-employment intention among Polish small business owners. Central European Management Journal, 31(1), 115–129. doi:10.1108/cemj-03-2022-0040.

[19] Johari, J., Shamsudin, F. M., Zainun, N. F. H., Yean, T. F., & Yahya, K. K. (2022). Institutional leadership competencies and job performance: the moderating role of proactive personality. International Journal of Educational Management, 36(6), 1027–1045. doi:10.1108/IJEM-07-2021-0280.

[20] Domanski, D., Howaldt, J., & Kaletka, C. (2020). A comprehensive concept of social innovation and its implications for the local context–on the growing importance of social innovation ecosystems and infrastructures. European Planning Studies, 28(3), 454–474. doi:10.1080/09654313.2019.1639397.

[21] Oeij, P. R. A., van der Torre, W., Vaas, F., & Dhondt, S. (2019). Understanding social innovation as an innovation process: Applying the innovation journey model. Journal of Business Research, 101, 243–254. doi:10.1016/j.jbusres.2019.04.028.

[22] Dacin, P. A., Dacin, M. T., & 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. doi:10.5465/amp.24.3.37.

[23] Leonelli, S., Masciarelli, F., & Fontana, F. (2022). The impact of personality traits and abilities on entrepreneurial orientation in SMEs. Journal of Small Business and Entrepreneurship, 34(3), 269–294. doi:10.1080/08276331.2019.1666339.

[24] Vizcaíno, F. V., Cardenas, J. J., & Cardenas, M. (2021). A look at the social entrepreneur: the effects of resilience and power distance personality traits on consumers' perceptions of corporate social sustainability. International Entrepreneurship and Management Journal, 17(1), 83–103. doi:10.1007/s11365-019-00626-0.

[25] Gupta, P., Chauhan, S., Paul, J., & Jaiswal, M. P. (2020). Social entrepreneurship research: A review and future research agenda. Journal of Business Research, 113, 209–229. doi:10.1016/j.jbusres.2020.03.032.

[26] Jayawardhana, K., & Weerakoon, C. (2024). Social Entrepreneurial Self-Efficacy and Social Innovation: Effects of Country Default and Market Orientation. Journal of Social Entrepreneurship, 2389233. doi:10.1080/19420676.2024.2389233.

[27] Hossain, M. U., Arefin, M. S., & Yukongdi, V. (2024). Personality Traits, Social Self-Efficacy, Social Support, and Social Entrepreneurial Intention: The Moderating Role of Gender. Journal of Social Entrepreneurship, 15(1), 119–139. doi:10.1080/19420676.2021.1936614.

[28] Dwivedi, A., & Weerawardena, J. (2018). Conceptualizing and operationalizing the social entrepreneurship construct. Journal of Business Research, 86, 32–40. doi:10.1016/j.jbusres.2018.01.053.

[29] Phillips, W., Lee, H., Ghobadian, A., O'Regan, N., & James, P. (2015). Social Innovation and Social Entrepreneurship: A Systematic Review. Group and Organization Management, 40(3), 428–461. doi:10.1177/1059601114560063.

[30] Urmanavičienė, A., & Butkevičienė, E. (2023). The Role of Work Integration Social Enterprises in Achieving Sustainable Development Goals during the COVID-19 Pandemic: The Case Study of Lithuania. Sustainability (Switzerland), 15(5), 4324. doi:10.3390/su15054324.

[31] Chaves-Avila, R., & Gallego-Bono, J. R. (2020). Transformative policies for the social and solidarity economy: The new generation of public policies fostering the social economy in order to achieve sustainable development goals. The European and Spanish cases. Sustainability (Switzerland), 12(10), 4059. doi:10.3390/SU12104059.

[32] Tiwari, P., Bhat, A. K., & Tikoria, J. (2017). The role of emotional intelligence and self-efficacy on social entrepreneurial attitudes and social entrepreneurial intentions. Journal of Social Entrepreneurship, 8(2), 165–185. doi:10.1080/19420676.2017.1371628.

[33] Bandura, A. (1995). Self-Efficacy in Changing Societies. Self-Efficacy in Changing Societies, 10(4), 344. doi:10.1017/cbo9780511527692.

[34] Urban, B. (2008). Social entrepreneurship in South Africa: Delineating the construct with associated skills. International Journal of Entrepreneurial Behaviour and Research, 14(5), 346–364. doi:10.1108/13552550810897696.

[35] Dempsey, S. E., & Sanders, M. L. (2010). Meaningful work? Nonprofit marketization and work/ life imbalance in popular autobiographies of social entrepreneurship. Organization, 17(4), 437–459. doi:10.1177/1350508410364198.

[36] Gupta, S., Kumar, V., & Karam, E. (2020). New-age technologies-driven social innovation: What, how, where, and why? Industrial Marketing Management, 89, 499–516. doi:10.1016/j.indmarman.2019.09.009.

[37] Jessop, B., Moulaert, F., Hulgård, L., & Hamdouch, A. (2013). Social innovation research: a new stage in innovation analysis? The International Handbook on Social Innovation. doi:10.4337/9781849809993.00020.

[38] Mulgan, G. (2006). The Process of Social Innovation. Innovations: Technology, Governance, Globalization, 1(2), 145–162. doi:10.1162/itgg.2006.1.2.145.

[39] Bessant, J., & Tidd, J. (2007). Innovation and entrepreneurship. John Wiley & Sons, New Jersey, United States.

[40] Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic Growth: Conceptual Foundations and Empirical Evidence. Psychological Inquiry, 15(1), 1–18. doi:10.1207/s15327965pli1501_01.

[41] Branzei, O., & Abdelnour, S. (2010). Another day, another dollar: Enterprise resilience under terrorism in developing countries. Journal of International Business Studies, 41(5), 804–825. doi:10.1057/jibs.2010.6.

[42] Natland, S., Wathne, K., & Hansen, R. (2024). The meaning of social work leadership. A local development process to enhance social services and reduce school dropout. Social Work Education. doi:10.1080/02615479.2024.2397059.

[43] Crant, J. M. (2000). Proactive behavior in organizations. Journal of Management, 26(3), 435–462. doi:10.1177/014920630002600304.

[44] Kickul, J., & Gundry, L. K. (2002). Prospecting for strategic advantage: The proactive entrepreneurial personality and small firm innovation. Journal of Small Business Management, 40(2), 85–97. doi:10.1111/1540-627x.00042.

[45] Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. Journal of Organizational Behavior, 14(2), 103–118. doi:10.1002/job.4030140202.

[46] Ng, T. W. H., & Lucianetti, L. (2016). Within-individual increases in innovative behavior and creative, persuasion, and change self-efficacy over time: A social-cognitive theory perspective. Journal of Applied Psychology, 101(1), 14–34. doi:10.1037/apl0000029.

[47] Mair, J., & Noboa, E. (2006). Social Entrepreneurship: How Intentions to Create a Social Venture are Formed. Social Entrepreneurship, 121–135. doi:10.1057/9780230625655_8.

[48] Hwee Nga, J. K., & Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start up intentions. Journal of Business Ethics, 95(2), 259–282. doi:10.1007/s10551-009-0358-8.

[49] Broccia, S., Dias, Á., & Pereira, L. (2022). Sustainable Entrepreneurship: Comparing the Determinants of Entrepreneurial Self-Efficacy and Social Entrepreneurial Self-Efficacy. Social Sciences, 11(12), 537. doi:10.3390/socsci11120537.

[50] Laviolette, E. M., Lefebvre, M. R., & Brunel, O. (2012). The impact of story bound entrepreneurial role models on self-efficacy and entrepreneurial intention. International Journal of Entrepreneurial Behaviour and Research, 18(6), 720–742. doi:10.1108/13552551211268148.

[51] Urban, B. (2020). Entrepreneurial alertness, self-efficacy and social entrepreneurship intentions. Journal of Small Business and Enterprise Development, 27(3), 489–507. doi:10.1108/JSBED-08-2019-0285.

[52] Wang, J. H., Chang, C. C., Yao, S. N., & Liang, C. (2016). The contribution of self-efficacy to the relationship between personality traits and entrepreneurial intention. Higher Education, 72(2), 209–224. doi:10.1007/s10734-015-9946-y.

[53] Chen, M. F. (2015). Self-efficacy or collective efficacy within the cognitive theory of stress model: Which more effectively explains people's self-reported proenvironmental behavior? Journal of Environmental Psychology, 42, 66–75. doi:10.1016/j.jenvp.2015.02.002.

[54] Mohd Noor, N. H., Mohamad Fuzi, A., & El Ashfahany, A. (2023). Institutional support and self-efficacy as catalysts for new venture performance: a study of iGen entrepreneurs. Journal of Entrepreneurship and Public Policy, 12(3–4), 173–196. doi:10.1108/JEPP-02-2023-0015.

[55] Yeh, C. H., Wang, Y. S., Hsu, J. W., & Lin, S. jeng. (2020). Predicting individuals' digital autopreneurship: Does educational intervention matter? Journal of Business Research, 106, 35–45. doi:10.1016/j.jbusres.2019.08.020.

[56] Onsongo, E. (2019). Institutional entrepreneurship and social innovation at the base of the pyramid: the case of M-Pesa in Kenya. Industry and Innovation, 26(4), 369–390. doi:10.1080/13662716.2017.1409104.

[57] Saebi, T., Foss, N. J., & Linder, S. (2019). Social Entrepreneurship Research: Past Achievements and Future Promises. Journal of Management, 45(1), 70–95. doi:10.1177/0149206318793196.

[58] Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. Journal of Business Venturing, 15(5), 411–432. doi:10.1016/S0883-9026(98)00033-0.

[59] Fischer, M., Foord, D., Frecè, J., Hillebrand, K., Kissling-Näf, I., Meili, R., Peskova, M., Risi, D., Schmidpeter, R., & Stucki, T. (2023). Social Innovation (or Why We Need the Civil Society), 77–89. doi:10.1007/978-3-031-25397-3_5.

[60] Sahoo, P. K., Datta, R., Rahman, M. M., & Sarkar, D. (2024). Sustainable Environmental Technologies: Recent Development, Opportunities, and Key Challenges. Applied Sciences (Switzerland), 14(23), 956. doi:10.3390/app142310956.

[61] Aksoy, L., Alkire (née Nasr), L., Choi, S., Kim, P. B., & Zhang, L. (2019). Social innovation in service: a conceptual framework and research agenda. Journal of Service Management, 30(3), 429–448. doi:10.1108/JOSM-11-2018-0376.

[62] Urama, K. C., & Acheampong, E. (2013). Social innovation creates prosperous societies. Unleashing Breakthrough Innovation in Government, 9-11.

[63] Shamsuddin, S. (2020). Resilience resistance: The challenges and implications of urban resilience implementation. Cities, 103. doi:10.1016/j.cities.2020.102763.

[64] Renko, M., Bullough, A., & Saeed, S. (2021). How do resilience and self-efficacy relate to entrepreneurial intentions in countries with varying degrees of fragility? A six-country study. International Small Business Journal: Researching Entrepreneurship, 39(2), 130–156. doi:10.1177/0266242620960456.

[65] Duchek, S. (2018). Entrepreneurial resilience: a biographical analysis of successful entrepreneurs. International Entrepreneurship and Management Journal, 14(2), 429–455. doi:10.1007/s11365-017-0467-2.

[66] Al-Omoush, K., Ribeiro-Navarrete, B., & McDowell, W. C. (2024). The impact of digital corporate social responsibility on social entrepreneurship and organizational resilience. Management Decision, 62(8), 2621–2640. doi:10.1108/MD-11-2022-1613.

[67] Alameddine, M., Bou-Karroum, K., Ghalayini, W., & Abiad, F. (2021). Resilience of nurses at the epicenter of the COVID-19 pandemic in Lebanon. International Journal of Nursing Sciences, 8(4), 432–438. doi:10.1016/j.ijnss.2021.08.002.

[68] Kolvereid, L., & Åmo, B. W. (2019). Growth intention and growth in small accounting firms. Administrative Sciences, 9(2), 36. doi:10.3390/admsci9020036.

[69] Schmitt, A., Den Hartog, D. N., & Belschak, F. D. (2022). Understanding the initiative paradox: the interplay of leader neuroticism and follower traits in evaluating the desirability of follower proactivity. European Journal of Work and Organizational Psychology, 31(2), 186–199. doi:10.1080/1359432X.2021.1950690.

[70] Tian, X., Zhao, C., & Ge, X. (2022). Entrepreneurial Traits, Relational Capital, and Social Enterprise Performance: Regulatory Effects of Cognitive Legitimacy. Sustainability (Switzerland), 14(6), 3336. doi:10.3390/su14063336.

[71] Nielsen, J., Firth, B., & Crawford, E. (2023). For Better and Worse: How Proactive Personality Alters the Strain Responses to Challenge and Hindrance Stressors. Organization Science, 34(2), 589–612. doi:10.1287/orsc.2022.1587.

[72] Kruse, P., Wach, D., & Wegge, J. (2021). What motivates social entrepreneurs? A meta-analysis on predictors of the intention to found a social enterprise. Journal of Small Business Management, 59(3), 477–508. doi:10.1080/00472778.2020.1844493.

[73] Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. Journal of Management, 36(2), 381–404. doi:10.1177/0149206309335187.

[74] Yitshaki, R., & Kropp, F. (2016). Motivations and Opportunity Recognition of Social Entrepreneurs. Journal of Small Business Management, 54(2), 546–565. doi:10.1111/jsbm.12157.

[75] Kim, H. S., & Park, I. J. (2017). Influence of Proactive Personality on Career Self-Efficacy. Journal of Employment Counseling, 54(4), 168–182. doi:10.1002/joec.12065.

[76] McCormick, B. W., Guay, R. P., Colbert, A. E., & Stewart, G. L. (2019). Proactive personality and proactive behaviour: Perspectives on person–situation interactions. Journal of Occupational and Organizational Psychology, 92(1), 30–51. doi:10.1111/joop.12234.

[77] Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage Publications, Sage Publications, New York, United States.

[78] Gartner, W. B. (2016). "Who is an entrepreneur?" Is the wrong question. Entrepreneurship as Organizing: Selected Papers of William B. Gartner, 12(4), 25–46. doi:10.1177/104225878901300406.

[79] Cohen, J. (2013). Statistical Power Analysis for the Behavioral Sciences. Statistical Power Analysis for the Behavioral Sciences. doi:10.4324/9780203771587.

[80] Bryman, A. (2016). Social research methods. Oxford University Press, Oxford, United Kingdom.

[81] van Teijlingen, E., & Hundley, V. (2002). The importance of pilot studies. Nursing Standard (Royal College of Nursing (Great Britain): 1987), 16(40), 33–36. doi:10.7748/ns2002.06.16.40.33.c3214.

[82] Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial Least Squares Structural Equation Modeling. Handbook of Market Research, 587–632. doi:10.1007/978-3-319-57413-4_15.

[83] Smith, H. M., & Betz, N. E. (2000). Development and Validation of a Scale of Perceived Social Self-Efficacy. Journal of Career Assessment, 8(3), 283–301. doi:10.1177/106907270000800306.

[84] Dawson, P., & Daniel, L. (2010). Understanding social innovation: A provisional framework. International Journal of Technology Management, 51(1), 9–21. doi:10.1504/IJTM.2010.033125.

[85] Campbell-Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the Connor-Davidson Resilience Scale (CD-RISC): Validation of a 10-item measure of resilience. Journal of Traumatic Stress, 20(6), 1019–1028. doi:10.1002/jts.20271.

[86] Connor, K. M., & Davidson, J. R. T. (2003). Development of a new Resilience scale: The Connor-Davidson Resilience scale (CD-RISC). Depression and Anxiety, 18(2), 76–82. doi:10.1002/da.10113.

[87] Zhang, Y., Trusty, J., Goroshnikova, T., Kelly, L., Kwong, K. K., McGuire, S. J. J., Perusquia, J., Prabhu, V. P., Shen, M., & Tang, R. (2021). Millennial social entrepreneurial intent and social entrepreneurial self-efficacy: a comparative entrepreneurship study. Social Enterprise Journal, 17(1), 20–43. doi:10.1108/SEJ-07-2020-0054.

[88] Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. International Journal of Multivariate Data Analysis, 1(2), 107-123. doi:10.1504/ijmda.2017.087624.

[89] Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In Handbook of market research. Springer International Publishing, Cham, Switzerland.

[90] Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research, 18(1), 39. doi:10.2307/3151312.

[91] Fainshmidt, S., Witt, M. A., Aguilera, R. V., & Verbeke, A. (2020). The contributions of qualitative comparative analysis (QCA) to international business research. Journal of International Business Studies, 51(4), 455–466. doi:10.1057/s41267-020-00313-1.

[92] Ragin, C. C. (2000). Fuzzy-set social science. University of Chicago Press, Chicago, United States.

[93] Mello, P. A. (2021). Qualitative comparative analysis: An introduction to research design and application. Georgetown University Press, Washington, DC., United States.

[94] Woodside, A. G. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. Journal of Business Research, 66(4), 463–472. doi:10.1016/j.jbusres.2012.12.021.

[95] Schneider, C. Q., & Wagemann, C. (2009). Set-theoretic methods for the social sciences: A guide to qualitative comparative analysis. Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis. Cambridge University Press, Cambridge, United Kingdom. doi:10.1017/CBO9781139004244.

[96] Ragin, C. C. (2008). What is Qualitative Comparative Analysis (QCA)? Economic and Social Research Council's Research Methods Festival, Saint Catherine's College, Oxford University, 1–19.

[97] Rihoux, B., & Ragin, C. (2012). Configurational Comparative Methods: Qualitative Comparative Analysis (QCA) and Related Techniques. In Configurational Comparative Methods: Qualitative Comparative Analysis (QCA) and Related Techniques, 51. doi:10.4135/9781452226569.

[98] Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. Journal of Vocational Behavior, 110, 403–419. doi:10.1016/j.jvb.2018.05.012.

[99] Urban, B., & Ratsimanetrimanana, F. (2019). Access to finance and entrepreneurial intention: An empirical study of Madagascan rural areas. Journal of Enterprising Communities, 13(4), 455–471. doi:10.1108/JEC-12-2018-0106.

[100] Smith, I. H., & Woodworth, W. P. (2012). Developing social entrepreneurs and social innovators: A social identity and self-efficacy approach. Academy of Management Learning and Education, 11(3), 390–407. doi:10.5465/amle.2011.0016.

[101] Grimm, N. B., Chapin, F. S., Bierwagen, B., Gonzalez, P., Groffman, P. M., Luo, Y., Melton, F., Nadelhoffer, K., Pairis, A., Raymond, P. A., Schimel, J., & Williamson, C. E. (2013). The impacts of climate change on ecosystem structure and function. Frontiers in Ecology and the Environment, 11(9), 474–482. doi:10.1890/120282.

[102] van der Have, R. P., & Rubalcaba, L. (2016). Social innovation research: An emerging area of innovation studies? Research Policy, 45(9), 1923–1935. doi:10.1016/j.respol.2016.06.010.

[103] Ayala, J. C., & Manzano, G. (2014). The resilience of the entrepreneur. Influence on the success of the business. A longitudinal analysis. Journal of Economic Psychology, 42, 126–135. doi:10.1016/j.joep.2014.02.004.

[104] Bullough, A., & Renko, M. (2013). Entrepreneurial resilience during challenging times. Business Horizons, 56(3), 343–350. doi:10.1016/j.bushor.2013.01.001.

[105] Gunawan, M., Soetjipto, B., & Sudhartio, L. (2023). How to link organizational resilience to transformational entrepreneurship behavior as theoretical framework gap – A systematic literature review. F1000Research, 12. doi:10.12688/f1000research.133459.1.

[106] Crant, J. M. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. Journal of Small Business Management, 34(3), 42–49.

[107] Prabhu, G. N. (1999). Social entrepreneurial leadership. Career Development International, 4(3), 140–145. doi:10.1108/13620439910262796.

[108] Zampetakis, L. A., Kafetsios, K., Bouranta, N., Dewett, T., & Moustakis, V. S. (2009). On the relationship between emotional intelligence and entrepreneurial attitudes and intentions. International Journal of Entrepreneurial Behaviour and Research, 15(6), 595–618. doi:10.1108/13552550910995452.

[109] Frese, M., & Gielnik, M. M. (2014). The Psychology of Entrepreneurship. Annual Review of Organizational Psychology and Organizational Behavior, 1, 413–438. doi:10.1146/annurev-orgpsych-031413-091326.