

RESEARCH ARTICLE

The role of emotional intelligence on social entrepreneurial intention of university students: evidence from a lower-middle income country

Md. Abu Issa Gazi^{1,2*}, Fatima Khuku Mony^{3*}, Md. Shamsul Arefin³, Md. Sahidur Rahman⁴, Abdul Rahman bin S Senathirajah¹, Md. Atikur Rahaman²

¹ Faculty of Business and Communications, INTI International University, Persiaran Perdana BBN Putra Nilai, 71800 Nilai, Negeri Sembilan, Malaysia

² School of Management, Jiujiang University, Jiujiang, 332005, China

³ Department of Management Studies, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj 8100, Bangladesh;

⁴ Department of Management, University of Chittagong, Chittagong, 4331, Bangladesh

* Corresponding author: maigazi@yahoo.com (M.A.I.G.); fatimakhukumony@gmail.com (F.K.M.)

ABSTRACT

Objective: The application of the Theory of Planned Behavior (TPB) is employed to scrutinize how emotional intelligence relates to the intention for social entrepreneurship within the context of Bangladesh. Specifically, this study investigates whether relationship management, social awareness, self-awareness, and self-management components constituting emotional intelligence- affect the decision-making process towards embracing social entrepreneurship.

Research Design & Methods: In accordance with a quantitative methodology, a cohort of 400 freshmen from Bangladeshi universities, aged between 21 and 26, participated in responding to a structured questionnaire comprising 46 items. Data collection employed a systematic random sampling technique. Subsequently, for hypothesis assessment, the SmartPLS version 4 software facilitated consistent PLS-SEM algorithm and bootstrapping analyses.

Findings: According to survey findings, there is a strong positive association between the relevant variables. The results demonstrate that intentions of students to become social entrepreneurs were highly influenced by their levels of relationship management, social awareness, and self-management. However, it is observed that self-awareness did not significantly contribute to the inclination towards social entrepreneurship.

Implications & Recommendations: The findings of this study hold potential utility for academia and policymakers aiming to foster social entrepreneurship among university students. Succeeding research endeavors could enhance the understanding of social entrepreneurial intention by integrating contextual variables, thus providing a comprehensive perspective on the phenomenon.

Contribution & Value Added: This study examines entrepreneurial intention within a distinct entrepreneurial context, integrating the four dimensions of emotional intelligence into the realm of social entrepreneurship research.

Keywords: Relationship management; social awareness; self-awareness; self-management; social entrepreneurial intention; sustainable growth

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1. Introduction

In recent years, the concept of social entrepreneurship has gathered increasing attention as a viable avenue for addressing societal challenges while nurturing economic development ^[1-3]. Rooted in the philosophy of creating positive social impact, social entrepreneurship represents a dynamic domain where individuals harness entrepreneurial principles to enact meaningful change. Amidst this evolving landscape, understanding the underlying determinants of social entrepreneurial intention has emerged as a focal point for researchers and practitioners alike ^[4-6]. Consequently, emotional intelligence (EI), characterized by the capability to recognize, understand, and manage one's own emotions, as well as those of others, has garnered considerable interest in various fields, including entrepreneurship ^[7-9]. Within the context of social entrepreneurship, where empathy, resilience, and interpersonal skills are paramount, the role of emotional intelligence in shaping entrepreneurial intentions warrants exploration.

Entrepreneurship significantly impacts economic growth, job creation, and reducing economic inequality, making it highly relevant today ^[10]. From an economic perspective, social entrepreneurship contributes to job creation, particularly in underserved areas, thereby fostering local economies ^[11]. By introducing innovative solutions and sustainable practices, social enterprises can enhance productivity and resource optimization, stimulating broader economic growth. Additionally, the emphasis on social value often leads to the development of products and services that traditional markets might overlook, further driving economic diversification and resilience. On the social front, social entrepreneurship plays a crucial role in community empowerment and social equity. Social enterprises aim to reduce social inequalities and enhance the overall quality of life by equipping marginalized groups with essential skills, resources, and opportunities ^[12-13]. Chell, E., Nicolopoulou, K., & Karataş-Özkan, M ^[14] articulated that the innovative nature of social entrepreneurship often brings about effective solutions to persistent social problems, fostering a culture of innovation and collaboration within communities. This not only addresses immediate social issues but also contributes to long-term societal development.

In understanding the drivers behind social entrepreneurship, the concept of entrepreneurial intention is pivotal ^[14-16]. It is vital in roles requiring customer interaction and enhances social interactions, mental and physical health, job satisfaction, performance, and career success ^[17-20]. Research shows that individuals with higher emotional intelligence perform better ^[18,21]. Therefore, entrepreneurial intention is defined as the conscious state of mind that directs attention, experience, and action towards the objective of starting a new business or venture ^[22-23]. This intention reflects a commitment to pursuing entrepreneurial activities and is shaped by factors such as personal attitude, perceived behavioral control, and social norms. Entrepreneurship involves generating ideas, recognizing, and exploiting opportunities to create societal value ^[24-25]. Cultivating entrepreneurial thinking enhances the quality and quantity of entrepreneurs, fostering entrepreneurship ^[6,27]. Entrepreneurial intention, a planned-oriented behavior, predicts the recognition of potential entrepreneurial opportunities ^[27-28]. Entrepreneurship comprises actions or behaviors, influenced by personality traits ^[11, 29]. Since the Theory of Planned Behavior (TPB) is a psychological theory that links beliefs and behavior. It was proposed by Ajzen, I ^[30] as an extension of the Theory of Reasoned Action, which he developed with Ajzen, I., & Fishbein, M ^[31]. It aims to explain how individuals come to engage in a particular behavior based on their intentions, attitudes, and perceived control over the behavior. Consequently, emotional intelligence, which assesses personality traits, involves understanding and responding to emotions to foster beneficial relationships ^[21].

Furthermore, perceived behavioral control is a concept that describes how entrepreneurship education can change students' beliefs about the challenges of beginning their own business ^[32]. Since one's intentions

are thought to be what motivates one to take a particular action, it makes sense to assess the impact of educational initiatives on entrepreneurial behavior, which is defined as behavior geared toward starting a business [33]. However, the objectives of entrepreneurship education have changed over time, much as the term "entrepreneurship" has undergone multiple definitions. The capacity to recognize and seize business opportunities is seen by some definitions as a crucial component of entrepreneurship [34]. Because specialists undoubtedly endorse it, an entrepreneurial mentality is an important variable in entrepreneurship research [35-36]. In particular, in their study, Jiatong W, Murad M, Bajun F, Tufail MS, Mirza F, Rafiq M [37] established a relationship between the entrepreneurial mindset and more profound cognitive processes that indicate the distinctive participation of entrepreneurial activities. The groundwork of entrepreneurial purpose is based on cognitive adaptation, which is a crucial element in achieving desired results after engaging in business activity [38].

The study of [28,39] has investigated the impact of emotional intelligence on social entrepreneurial intentions considering emotional intelligence as a single variable. Goleman has popularized the emotional intelligence concept by providing four elements - self-awareness, self-management, social awareness, and relationship management [40]. Even though emotional intelligence has four essential components, almost no studies have examined the effect of each element on social entrepreneurial intention. Analyzing emotional intelligence from a four-dimensional viewpoint helps us to understand whether the components are related to social entrepreneurial intention or not.

By delving into this understudied intersection, our research seeks to contribute both theoretically and practically by drawing three research questions- how do the elements of emotional intelligence (self-awareness, self-management, social awareness, and relationship management) impact social entrepreneurial intention among Bangladeshi students? what role does the cultural and socio-economic context of Bangladesh play in shaping the impact of emotional intelligence on social entrepreneurial intention? and how can educational institutions in Bangladesh leverage these findings to foster social entrepreneurial intentions among students? Therefore, from a theoretical standpoint, this study aims to advance our understanding of the mechanisms through which emotional intelligence influences individuals' propensity towards social entrepreneurship. Empirically, our findings hold the potential to inform policymakers, educators, and aspiring entrepreneurs on strategies to cultivate and nurture social entrepreneurial intentions among Bangladesh's youth. Since it highlights the emotional and psychological factors that contribute to the development of social enterprises in the long-run for ensuring sustainable development.

The remaining parts of this article are designed as follows: Section 2 provides a literature review and relevant arguments against proper hypotheses development; Section 3 introduces the data and methodology; Section 4 outlines the empirical findings and discussions along with potential implications; and lastly, Section 5 delineates concluding remarks.

2. Literature Review and Hypotheses Development

2.1 Social Entrepreneurial Intention

The central concept of the theory of planned behavior revolves around the intention to carry out a certain behavior [41]. This intention is shaped by one's attitude towards the behavior, the influence of social norms, and the perception of control over the behavior [41]. When it comes to venture creation, immediate determinants (cognitive factors) referred to as motivational precursors might impact an individual's inclination towards entrepreneurship. Additionally, external circumstances like time limitations, task complexity, and the sway of others (family, peers, mentors) could also sway an individual's choice to pursue

entrepreneurship^[42]. The intensity of entrepreneurial aspirations tends to rise when cognitive traits are viewed positively^[27]. Consequently, entrepreneurial intention reflects an individual's eagerness and readiness to partake in entrepreneurial endeavors^[43]. Existing research widely validates the applicability of the theory of planned behavior in predicting entrepreneurial intention^[43], thus justifying its adoption as the theoretical framework for understanding entrepreneurial intention in this study.

According to Mair, J., Robinson, J., & Hockerts, K^[44], social entrepreneurs are motivated psychologically to gather information and ideas and create social enterprise plans. This is known as having a social entrepreneurial intention. The desire of a person to launch a social enterprise or venture that identifies social issues or promotes social change through creative solutions is referred to as such. It relates to someone's desire to launch a social enterprise or firm to encourage social change using ingenuity.^[41] Ajzen, I asserts that the purpose of an individual to carry out a specific activity—in this case, the intention to start a social enterprise that will have a positive impact on society—is the key component in the theory of planned behavior. Social entrepreneurs work to address significant social issues such as poverty, social formation, insufficient governmental assistance, and environmental issues in both developed and developing nations^[45]. For instance, by addressing societal challenges and problems, Professor Muhammad Yunus and Fazle Hasan Abed have changed the social structure in Bangladesh.

2.2 Emotional Intelligence

Emotional intelligence encompasses mental processes involving the recognition, handling, comprehension, and regulation of both personal and others' emotional states to tackle challenges and govern conduct. Within psychological discourse, the concept of emotional intelligence was introduced by Salovey, P. & Mayer, J. D^[46] and gained popularity through Goleman, D^[47] influential work "Emotional Intelligence". Salovey, P. & Mayer, J. D^[46] expressed emotional intelligence as "the capability to monitor one's own and others' moods and emotions, to discriminate among them, and to use this data to guide one's thinking and action." This nuanced definition outlined four interconnected dimensions: perception, assessment, and expression of emotions; leveraging emotions to facilitate thinking; understanding and analyzing emotional cues, employing emotional knowledge; and managing emotions^[48]. Subsequently, Goleman categorized these dimensions from two perspectives based on awareness and application. The first perspective focused on the "Self," highlighting the comprehension and regulation of one's own emotions (self-awareness and self-management). The other perspective pertained to "Others," emphasizing the recognition of emotions and fostering interpersonal connections (social awareness and relationship management). This study integrates these four dimensions concerning social entrepreneurial aspirations.

2.3 Relationship Management

Relationship management refers to associating with others to create and sustain mutual relationships^[40,49-50]. It is concerned with understanding own's emotions and emotions of others and the context for building and maintaining positive relationships. People who score high in relationship management tend to make changes together, lead to achieving higher-level goals, manage conflict effectively, motivate others through persuasion, and empower collaboration and teamwork^[51-52]. It is perceived as a management feature that makes use of conversation strategically. The Theory of Planned Behavior (TPB) posits that intention is influenced by attitudes, subjective norms, and perceived behavioral control. Relationship management aligns with the concept of perceived behavioral control, as effective RM skills enhance an individual's confidence in their ability to mobilize resources and support for entrepreneurial ventures. This management focuses on creating a partnership between a company and its patrons, rather than viewing the relationship as basically transactional^[53]. Social entrepreneurs need to raise funds from relatives, friends, and financial institutions to

start and grow a social venture ^[54]. Here, relationship management is essential for the business to secure money. To comprehend the need and take appropriate action to address social problems, social entrepreneurs must also develop social ties with the community. Using the knowledge, we can form hypotheses:

H1. Relationship management has a positive role in social entrepreneurship intention.

2.4 Social Awareness

In the words of Robbins, S. & Hunsaker, P ^[40] social awareness is a personality attribute that is concerned with comprehending and empathizing with others. Socially aware people can read a situation, feel the mood of others, sense and understand other perspectives, interact with diverse people, and put themselves in the shoes of others. Understanding other people's emotions, sentiments, behaviors, and situations and being able to react appropriately are all parts of social awareness ^[52, 55-56]. Social entrepreneurs are concerned about social needs and provide unique solution to address this need. Socially aware people also can sympathetically understand the viewpoint of others and act accordingly to maintain relations. Socially mindful entrepreneurs can understand the customers' condition and trends ^[54]. As social entrepreneurs are empathetic to others, we perceive that they are also socially aware of others' feelings and emotions. Socially conscious entrepreneurs may fit social entrepreneurial careers as they possess the same traits required to understand social needs and unique solutions to address community problems. Hence, this awareness aligns with subjective norms, as it reflects the social expectations and values related to addressing social issues. Based on the given argument, we can suggest that

H2. Social awareness has a positive effect on social entrepreneurship intention.

2.5 Self-Awareness

Self-awareness is the conscious awareness of one's character, emotions, motivations, and desires. It describes a person's capacity to realize the effects of their own emotions on both their personal lives and their professional careers. Being self-aware allows a person to be aware of suppressing their feelings and emotions. Self-aware and emotionally in touch, people are better at directing their own lives and behaviors ^[57-58]. Additionally, other traits are built on the foundation of this quality. Understanding one's own emotions makes it difficult to manage or comprehend those of others. This quality makes a significant contribution to an entrepreneurial business' success. Higher self-aware social entrepreneurs may grasp their gut instinct and apply it to make wise judgments in difficult circumstances ^[58-59]. Social entrepreneurs who are aware of themselves may identify their assets and flaws and boldly handle their actions. High self-awareness allows individuals to identify their passion for social issues and their capacity to contribute positively, thus fostering a strong intention to engage in social entrepreneurship ^[60-61]. For this reason, we think that one of the criteria for becoming a social entrepreneur is having a better awareness of one's emotions and how they affect one's life. So, it is suggested that:

H3. Self-awareness influences the intention to engage in social entrepreneurship positively.

2.6 Self-management

According to Robbins, S. & Hunsaker, P ^[40], self-management refers to a person's ability to comprehend their emotions and control their sentiments to handle a circumstance. It is concerned with managing emotions in a healthy way to control behaviors and adjust to changing conditions. People with higher scores in self-management can execute their actions, thoughts, and moods flexibly to generate desirable outcomes. Self-management is a way to be focused on the activity and behavior even in a situation that causes distraction. It is the traits that help an employee experience and be greater productive in the workplace ^[62]. A good score in this dimension assists an entrepreneur in growing as a successful and advantageous

entrepreneur ^[62-64]. Due to the dual nature of serving society and making a profit, social entrepreneurs have to face turbulent situations where they need to be focused and determined to control their emotions and mood. Entrepreneurs with high self-management attributes can observe and manage their emotions to tackle stress, limiting burnout while driving a new venture ^[54]. Therefore, this heightened sense of control and self-efficacy fosters a positive attitude towards entrepreneurial activities, including social entrepreneurship. Based on this, we can hypothesize that:

H4. The intention to engage in social entrepreneurship is positively impacted by self-management.

We may create the research framework shown in **Figure 1** below based on the literature review and the hypotheses taken into consideration for the study:

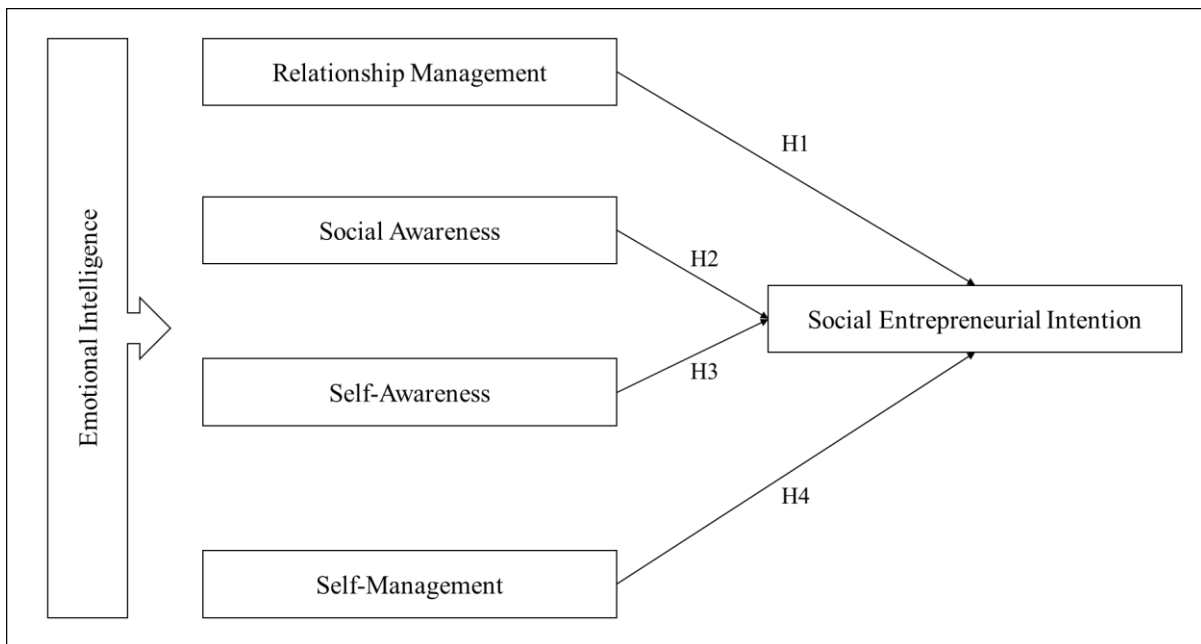


Figure 1: Research Framework of the Study

3. Data and Methodology

3.1 Sample and Measures

The primary objective of this study is to explore the impact of emotional intelligence on the inclination towards social entrepreneurship. Given their potential as future social entrepreneurs, students were deemed suitable participants for this investigation. Moreover, students, who often face immediate career aspirations, offer a relevant cohort for scrutinizing aspirations towards social entrepreneurship ^[27]. Samples were obtained from students enrolled at public universities in Bangladesh. Surveys were distributed to students during class sessions by a designated coordinator responsible for overseeing the administration and collection of completed questionnaires. We distributed our survey to 500 students and received 400 completed responses, resulting in a response rate of 80%. This relatively high response rate indicates a strong engagement from the participants, further supporting the reliability of our data. The data for this study were collected over a period of three months, from September 2023 to January 2024. For participant recruitment, we applied the two criteria: Inclusion Criteria included students currently enrolled in undergraduate or graduate programs at Bangabandhu Sheikh Mujibur Rahman Science and Technology University (BSMRSTU) who were willing to participate and provide informed consent voluntarily. Exclusion Criteria included students who were not currently enrolled in any academic programs at BSMRSTU during the data

collection period or those who declined to participate or did not complete the survey. While our sample was drawn solely from BSMRSTU, we believe it is reasonably representative of the broader student population in public universities in Bangladesh, as BSMRSTU hosts a diverse student body with individuals from various locations across the country and abroad. However, we acknowledge that the findings may not be fully generalizable to all public universities without further studies involving multiple institutions. Moreover, a total of 400 students contributed information, and all samples were included in the analysis.

Yang, R., Meyskens, M., Zheng, C. & Hu, L ^[65] used a 6-item social entrepreneurship intention scale to measure social entrepreneurship intention. Initially, a survey comprising two segments- demographic data and measurement inquiries- was constructed. All the queries, originally formulated in English, were extracted from prior research endeavors. Afterwards, 40 items from ^[40] questionnaire were used to evaluate the construct of emotional intelligence (four dimensions, 10 items for each component). An experiment was designed to test the validity of the questionnaire. This study investigated four independent factors and one dependent variable using questionnaire items. Survey responses ranged from strongly disagree (coded as 1) through disagree (2), neutral (3), agree (4), to strongly agree (5).

3.2 Conceptual Framework

Six items assessed the social entrepreneurial intention (SEI). “I am ready to do anything to be a social entrepreneur that helps society” is an example of an item. It measures the degree of the respondent's propensity to be a future social entrepreneur. 10 questions were evaluated under self-awareness (SE) variable. One sample item was like, “I know when I am becoming angry.” It identifies an individual's level of understanding about personal emotion and its impact on others. Again, 10 questions were measured under self-management (SM) variable. A sample item was “I stay calm when I am the target of anger from others”. The items measure the extent to which an individual manages his emotions to adjust to situations. Furthermore, another 10 questions were assessed under social awareness (SA) variable. The items assess an individual's understanding of others' feelings and empathize with their feelings. A sample item was “I know the impact that my behavior has on others.” Finally, in the same way 10 questions were appraised under relationship management (RM) variable. This variable measures how an individual understands emotions and controls behavior to maintain mutual relations. A sample item was “I provide advice and emotional support to others as needed.”

3.3 Respondent Demographic Profile

Table 1 provides a breakdown of the sample population used in the study by age and gender (Panel A displays age and panel B illustrates gender). The age distribution demonstrated a majority of younger participants, with those aged 21 years comprising nearly 35% of the sample. Cumulatively, participants aged 21 to 23 years accounted for approximately 79.3% of the sample, indicating a predominantly young demographic. In terms of gender, males represented a significant majority, constituting 67.3% of the sample, while females made up 32.8%. The total sample size for the study was 400 individuals, with all percentages in both age and gender categories summing to 100%, ensuring complete representation of the sample data.

Table 1: Sample demographic statistics

Age and Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Panel A: Age				
21	139	34.8%	34.8%	34.8%
22	106	26.5%	26.5%	61.3%
23	72	18.0%	18.0%	79.3%
24	51	12.8%	12.8%	92.0%
25	32	8.0%	8.0%	100.0%
Total	400	100.0%	100.0%	
Panel B: Gender				
Male	269	67.3%	67.3%	67.3%
Female	131	32.8%	32.8%	100.0%
Total	400	100.0%	100.0%	

4. Results and Discussion

4.1 Measurement Model

Our study, conducted in Bangladesh, utilized the PLS-SEM approach with the Smart PLS-4 software ^[66]. PLS-SEM is renowned for its adaptability, accommodating both reflective and formative measurement models, and its efficacy in evaluating predictive outcomes (67-68). To address potential Common Method Variance (CMV) issues, we conducted reliability tests to validate the accuracy of our results.

In judging the measurement model, we conducted analyses to evaluate reliability, convergent validity, and discriminant validity. Initially, construct reliability was inspected using Cronbach's alpha, composite reliability, and composite reliability procedures. Subsequently, the study employed Average Variance Extracted (AVE) and cross-loading techniques to assess convergent validity, while discriminant validity was assessed through the Fornell and Larcker criteria and the Heterotrait-Monotrait ratio (HTMT), as endorsed by ^[69].

Moreover, we acknowledge the uncertainties inherent in our applied analysis. These may include potential biases in self-reported data, the cross-sectional nature of the study which limits causal inferences, and the exclusion of certain external factors that might influence social entrepreneurial intention.

4.2 Construct Reliability and Convergent Validity

Table 2 shows the construct and convergent reliability statistics. It is observed that all constructs demonstrated high internal uniformity, with Cronbach's alpha values well above the recommended verge set by ^[69-70] of 0.70. Specifically, the values ranged from 0.887 for SEI to 0.967 for SM, indicating strong reliability across the constructs. The results for composite reliability also reflected robust construct reliability. The constructs- RM, SE, SEI, SM consistently displayed composite reliability values above 0.90, signifying excellent steadfastness. Furthermore, we then proceeded to evaluate construct validity by employing the AVE. This metric gauge the proportion of variance accounted for by a construct, illustrating the ratio of the cumulative variance explained by the construct to the variance due to measurement. According to the observed results, the AVE values for all constructs exceeded the minimum criterion of 0.50 also proposed by Hair, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M ^[69], suggesting satisfactory convergent validity.

Values ranged from 0.627 for RM to 0.759 for SM. These results indicate that a significant portion of the variance in the observed variables is accounted for by the latent constructs they are intended to measure.

Table 2: Construct and convergent reliability statistics

Variables	Cronbach's alpha	(rho_a)	(rho_c)	AVE
RM	0.942	1.013	0.944	0.627
SA	0.962	0.765	0.944	0.628
SE	0.945	0.940	0.948	0.647
SEI	0.887	0.904	0.915	0.644
SM	0.967	0.983	0.969	0.759

Notes: The rho_a and rho_c measure the reliability of constructs, rho_a (like Cronbach's alpha) focuses on the average correlation among items, while rho_c (composite reliability) takes into account the factor loadings of items. AVE stands for Average Variance Extracted.

In addition, conducting an assessment of convergent validity, we scrutinized each indicator item's factor loading and cross-loading in relation to its associated latent construct. The results revealed substantial loading of measurement items onto their designated constructs, with minimal loading on other constructs, as evidenced by the cross-loading statistics demonstrated in Table 3. Moreover, all items demonstrated robust factor loadings ranging between 0.701 to 0.937 on their respective constructs. Hence, we can assert confidently that these measurement items effectively capture diverse latent factors.

Table 3: Cross-loading statistics

	Convergent validity				
	RM	SA	SE	SEI	SM
RM1	0.809				
RM2	0.786				
RM3	0.811				
RM4	0.866				
RM5	0.828				
RM6	0.789				
RM7	0.725				
RM8	0.768				
RM9	0.750				
RM10	0.777				
SA1		0.758			
SA2		0.876			
SA3		0.707			
SA4		0.937			
SA5		0.804			
SA6		0.814			
SA7		0.767			
SA8		0.751			
SA9		0.701			

	Convergent validity				
	RM	SA	SE	SEI	SM
SA10		0.808			
SE1			0.796		
SE2			0.793		
SE3			0.771		
SE4			0.858		
SE5			0.736		
SE6			0.782		
SE7			0.832		
SE8			0.848		
SE9			0.771		
SE10			0.847		
SEI1				0.896	
SEI2				0.869	
SEI3				0.846	
SEI4				0.780	
SEI5				0.710	
SEI6				0.706	
SM1					0.851
SM2					0.896
SM3					0.885
SM4					0.882
SM5					0.836
SM6					0.895
SM7					0.868
SM8					0.851
SM9					0.843
SM10					0.905

4.3 Discriminant Validity

The data illustrated in **Table 4** provides understandings into the discriminant legitimacy of the constructs within the study, using two established methods: the Fornell-Larcker criterion (Panel A) and the HTMT ratio (Panel B). Both methods are critical in ensuring that the constructs measured in the study are distinct and do not overlap unduly, which is crucial for the reliability of any model involving multiple constructs. In the Fornell-Larcker criterion, discriminant soundness is established if the square root of the AVE for each construct (shown on the diagonal) is greater than the correlations among constructs (off-diagonal values) ^[71]. The outcomes depict that all diagonal values exceed the off-diagonal correlation values between constructs, which advocates that each construct is indeed distinct and contributes uniquely to the model. This confirms strong discriminant validity as per the Fornell-Larcker criterion. Furthermore, the HTMT ratio is another robust measure for assessing discriminant validity. According to the guidelines provided by ^[69,72], an HTMT value below 0.85 indicates sufficient discriminant validity. The findings

demonstrate that each HTMT value is below the 0.85 edge, indicating strong discriminant validity. The only notable comparison is between SM and SA, which has an HTMT of 0.571. While this value is substantially higher than the others, it remains well below the 0.85 threshold, thus still supporting discriminant validity.

Table 4: Discriminant validity statistics

	RM	SA	SE	SEI	SM
Panel A: Fornell and lacker criteria					
RM	0.792				
SA	0.074	0.792			
SE	0.127	0.029	0.804		
SEI	0.182	0.11	0.101	0.802	
SM	-0.017	-0.454	0.075	0.079	0.871
Panel B: Heterotrait-Monotrait ratio (HTMT)					
RM	-				
SA	0.071	-			
SE	0.119	0.054	-		
SEI	0.129	0.065	0.081	-	
SM	0.066	0.571	0.087	0.07	-

4.4 Structural Model

The structural-model fit statistics depicted in **Table 5** offer insights into the goodness-of-fit of the saturated and estimated models used in the study. These statistics serve as indicators of how well the hypothesized structural model aligns with the observed data. SRMR statistic measures the average standardized discrepancy between the observed and predicted associations among variables. D_ULS and D_G are discrepancy statistics, with D_ULS representing the Unweighted Least Squares discrepancy and D_G representing the Geodesic discrepancy. The chi-square statistic calculates the conversion between the observed and expected covariance matrices. The NFI evaluates the proportionate improvement in fit by comparing the specified model with a baseline model (typically a null model). The results show that the structural-model fit statistics provide evidence regarding the adequacy of the hypothesized structural model in explaining the observed data. Since Both models exhibit an SRMR value of 0.067. A lower SRMR value indicates a better fit, suggesting that the structural models adequately capture the relationships among the variables. Consistency in fit across various statistics suggests that the estimated model closely approximates the saturated model, supporting its validity in explaining the relationships among the variables under investigation. Specifically, similar to SRMR, both models display identical values for D_ULS and D_G, indicating consistent fit across these measures. Meanwhile, both models demonstrate an NFI of 0.764, indicating that approximately 76.4% of the variance in the observed data is accounted for by the structural model.

Table 5: Structural-model fit statistics

	Saturated model	Estimated model
SRMR	0.067	0.067
D_ULS	4.816	4.816
D_G	2.959	2.959
Chi-square	4454.386	4454.386
NFI	0.764	0.764

Notes: SRMR, D_ULS and D_G, and NFI denote the standardized root mean square residual, the unweighted least squares discrepancy, the Geodesic discrepancy, and normed fit index, respectively.

Table 6 illustrates the hypothesis testing and path coefficients results. We applied a bootstrapping technique, generating 5000 resamples, to evaluate the proposed hypotheses. The findings demonstrate that relationship management (RM) (H1 hypothesis: RM->SEI) positively influences social entrepreneurial intention (SEI) with a path coefficient of 0.149 and a p-value of 0.041<0.05, indicating statistical significance. However, self-awareness (SE) (H3 hypothesis: SE->SEI) does not significantly influence SEI with a path coefficient of 0.047 and a p-value of 0.485>0.05, indicating lack of statistical significance. Meanwhile, social awareness (SA) (H2 hypothesis: SA->SEI) and self-management (SM) (H4 hypothesis: SM->SEI) positively impacts SEI with a path coefficient of 0.376 and a p-value of 0.025<0.05 and 0.335 and a p-value of 0.042<0.05, respectively, indicating significance of the statistics. Therefore, it is articulated that RM, SA, and SM positively influence SEI. However, SE alone does not significantly impact SEI, as indicated by the lack of support for Hypothesis 3.

Table 6: Hypothesis testing and path coefficient outcomes

Hypotheses	Relations	μ	ψ	σ	T statistics	P values	Comments
H1	RM -> SEI	0.18	0.149	0.084	1.951	0.041	Supported
H2	SA -> SEI	0.068	0.376	0.145	1.134	0.025	Supported
H3	SE -> SEI	0.079	0.047	0.092	0.698	0.485	Not Supported
H4	SM -> SEI	0.108	0.335	0.103	1.469	0.042	Supported

Notes: μ , ψ , and σ signs indicate sample mean, path coefficients, and standard deviation, respectively. It is stated that if the p-value associated with a hypothesis falls below the 5% threshold, it will necessitate the rejection of the null hypothesis.

Finally, **Figure 2 and 3** show the graphical structural model and path coefficients of the study. The graphical depiction of hypothesis testing aims to represent the relationships between different variables and how they contribute to the hypothesis testing process. Path coefficient histograms in hypothesis testing measure the strength and direction of the relationships between variables in a structural equation model (SEM) [73]. An adjusted R^2 value of 66.6% in Figure 2 indicates that four independent variables explained approximately 66.6% of dependent variable- SEI. In other words, the model with its chosen independent variables describes about two-thirds of the total variance in the dependent variable. Furthermore, in the investigation of the principal variables, namely RM, SA, SE, and SM each question pertaining to these variables demonstrates substantial support for its corresponding principal variable at a statistically significant level of 1%. The Figure 3 provides a visual representation of these coefficients, showing the distribution of path coefficients across different paths in the model. The outcomes indicate most of the observations are lying in the normal distribution range, evidencing the significance and relative strength of each path in the model. In addition, the results validate the hypothesized relationships between variables and provide insights into the underlying mechanisms driving the observed phenomena.

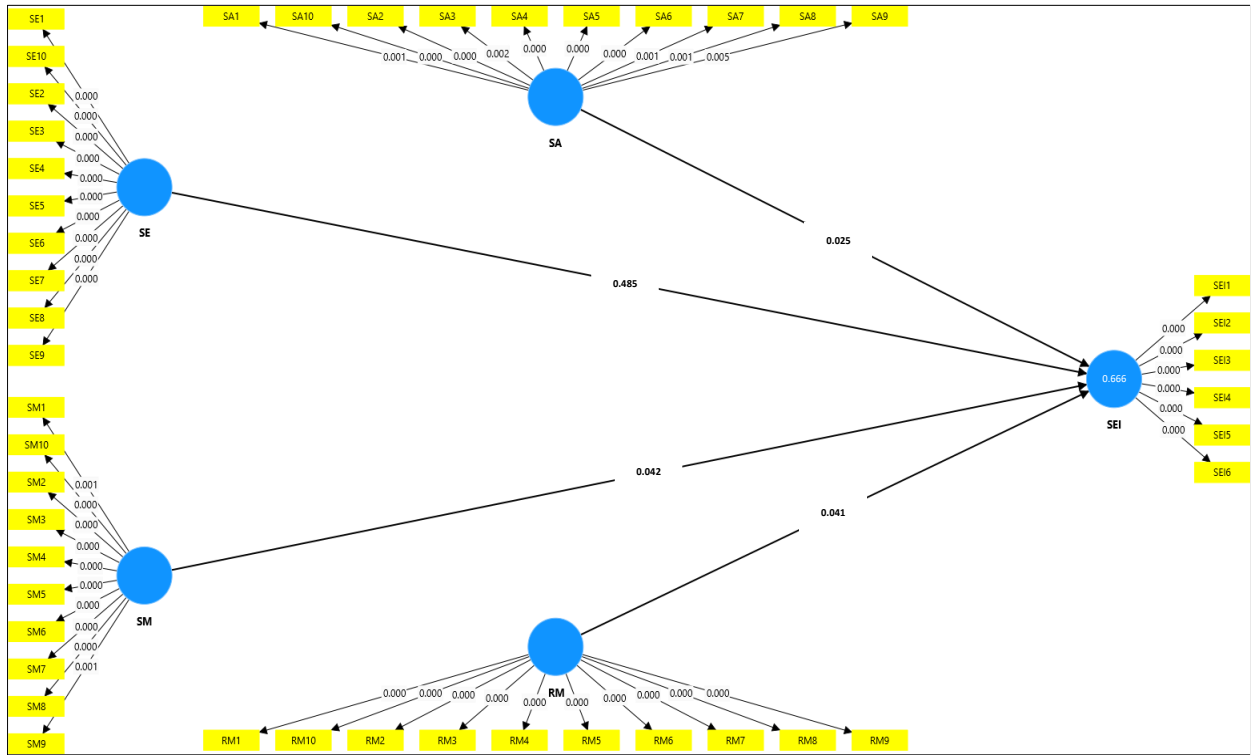


Figure 2: Graphical model outcomes of hypothesis testing

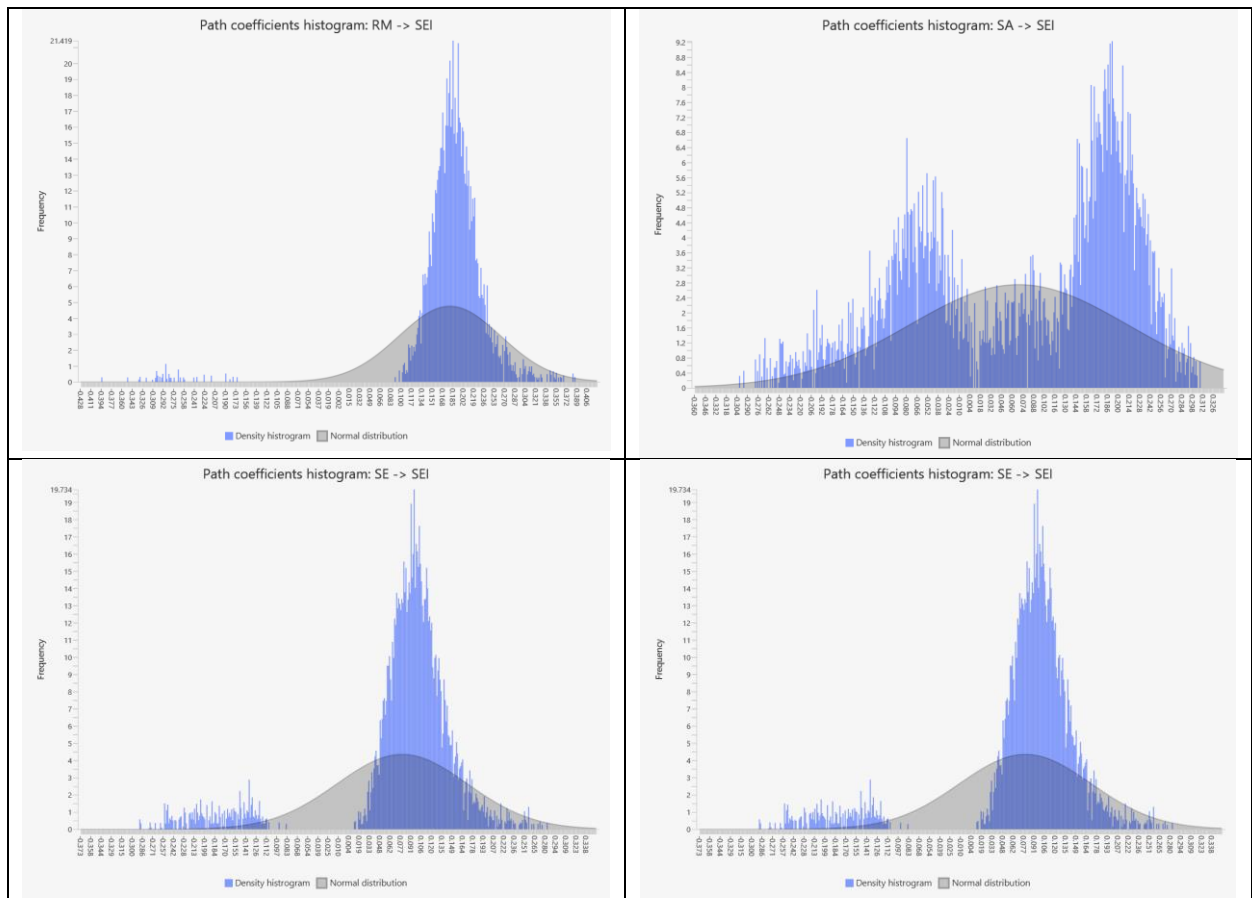


Figure 3: Path Coefficient Histograms

4.5 Discussion

Studies on emotional intelligence and social entrepreneurship are scarce at this time. Understanding the impact of emotional intelligence on social entrepreneurial intention has only been the subject of a few studies. As far as we can tell, there is a gap in the body of knowledge about the effects of the four elements of emotional intelligence on social entrepreneurship. Our study adds to the body of knowledge on social entrepreneurial purpose since it includes all four elements of emotional intelligence. This study looked into the effects of self-awareness, self-management, social awareness, and relationship management on the intention to engage in social entrepreneurship. Bootstrapping analysis was used to examine the hypotheses. Our results are consistent with the first, second, and fourth hypothesis, which were developed under the presumption that RM, SA, and SM significantly improve social entrepreneurial intention. It implies that students who are conscious of their own emotions and aware of how those feelings affect other people are more likely to become social entrepreneurs in the future.

Bangladesh has a collectivist culture where interpersonal relationships and community well-being are highly valued. This cultural backdrop aligns well with our finding that relationship management (RM) significantly improves SEI. In a collectivist society, the ability to manage relationships effectively is crucial for mobilizing support and resources for social entrepreneurial ventures. Furthermore, Bangladesh faces several socio-economic challenges, including poverty, unemployment, and social inequality. These issues create a fertile ground for social entrepreneurship, as there is a pressing need for innovative solutions to address these problems. Our findings that social awareness (SA) and self-management (SM) significantly improve SEI can be attributed to the heightened sensitivity and proactive attitude of students towards these societal challenges. Therefore, students in Bangladesh who excel in relationship management, socially aware, and can manage their emotions effectively are better equipped to recognize social needs and take initiative in addressing them through entrepreneurial activities. Our outcomes are consistent with the findings of [74-78]. This alignment underscores the robustness and validity of our research, reinforcing the conclusions drawn by these previous studies. However, Hockerts, K [79] reported contrasting findings.

One favorable argument stemming from these findings is the emphasis on emotional intelligence as a critical determinant of SEI. By recognizing and understanding their own emotions and how they impact others, students can cultivate the interpersonal skills necessary for effective social entrepreneurship [80-83]. This underscores the importance of fostering emotional intelligence among aspiring entrepreneurs, as it not only enhances their personal development but also equips them with the tools needed to navigate complex social issues and drive positive change in society. By incorporating curriculum elements that promote relationship management, social awareness, and self-management skills, educational institutions can empower students to harness their emotional intelligence for social entrepreneurship [84-85]. An expanding body of research [86-88] corroborates the notion that schools significantly contribute to the readiness of all students for both academic achievement and success in life. This occurs particularly when educational institutions prioritize competencies such as self-awareness, effective decision-making, goal setting, problem-solving abilities, and fostering positive and enduring relationships with others. This not only benefits individuals in their entrepreneurial endeavors but also contributes to broader societal goals such as economic development and social progress.

In addition, the confirmation of the hypothesis- relationship management plays an influential role in SEI, underscores the importance of interpersonal dynamics and network-building in the realm of social entrepreneurship. It suggests that the capacity to cultivate and maintain meaningful relationships with stakeholders, collaborators, and community members significantly shapes one's intention to engage in social entrepreneurial endeavors. This finding aligns with the growing recognition of the social and relational

aspects of entrepreneurship, emphasizing the interconnectedness between individual actors and the broader ecosystem in which they operate ^[20, 89-92]. Hence, to encourage and promote social entrepreneurship among students, teamwork and collaboration should be encouraged to understand others' behavior and emotions and learn how to build and maintain positive relationships.

However, another claim asserted that self-awareness influences social entrepreneurial intention favorably. Our results did not support this theory. In Bangladesh, while there is a growing emphasis on soft skills, the current educational system may not yet fully integrate emotional intelligence training, particularly self-awareness, into its curriculum. Students may receive more explicit training and encouragement in skills such as relationship management and social awareness, which are directly applicable to collaborative and community-focused activities. This might explain why self-awareness does not show a significant relationship with SEI, as it is less emphasized. This particular finding prompts us to delve deeper into understanding the complexities of self-awareness and its role in shaping entrepreneurial intentions, particularly in the context of social entrepreneurship ^[93-95]. It demonstrates that pupils who effectively control their emotions in trying circumstances won't inevitably end up as social entrepreneurs. Hockerts, K ^[79] found similar results in his study on the impact of social entrepreneurship education on the formation of entrepreneurial intentions in students.

4.6 Practical Implications

Our research provides several practical contributions to the understanding of emotional intelligence (EI) and its impact on social entrepreneurial intention (SEI) among students in Bangladesh. Given the scarcity of studies examining this relationship, our work addresses a significant gap in the existing literature by incorporating all four elements of emotional intelligence: self-awareness, self-management, social awareness, and relationship management. Through bootstrapping analysis, we investigated the effects of these elements on SEI, yielding results that have both academic and practical implications in the ground of enhancing social entrepreneurship education, addressing socio-economic challenges, promoting relationship management, contextualizing emotional intelligence training, and bridging research and practice.

Firstly, the outcomes suggest that educational institutions and training programs aimed at fostering social entrepreneurship should prioritize the development of emotional intelligence competencies, particularly SA, SM, and RM. Integrating emotional intelligence modules into entrepreneurship courses and workshops can enhance students' readiness and intention to pursue social entrepreneurial ventures. Secondly, since encouraging teamwork and collaborative group tasks within classroom settings, also articulated by ^[92, 96], facilitates not only the understanding of others' emotions but also enhances self-awareness. Consequently, educational institutions should contemplate the development of courses and programs that foster social entrepreneurship as a viable career path. Offering students opportunities to engage in part-time work within newly established start-ups can equip them with the skills to navigate complex and ever-changing scenarios with confidence. Thirdly, government agencies, NGOs, and other organizations involved in entrepreneurship development initiatives can tailor their programs to include components focused on enhancing emotional intelligence skills among aspiring social entrepreneurs. Finally, policymakers and advocates for social entrepreneurship can use the findings to inform policy development and advocacy efforts aimed at promoting a conducive ecosystem for social innovation. Advocating for the integration of emotional intelligence education in school curriculum, promoting research on the intersection of emotional intelligence and social entrepreneurship, and incentivizing investments in emotional intelligence training programs can contribute to nurturing a thriving community of socially conscious entrepreneurs.

5. Conclusions

In recent years, students worldwide have been motivated to make a difference, and thus they seek ways to help transform society for the better. Students who have higher intentions to be social entrepreneurs are morally empathetic and socially responsive. They are inclined to be engaged in social enterprises to make an impact on the community. Humans have social entrepreneurial intentions, which are psychological tendencies that drive them to learn about, develop, and implement social venture plans. This is emerging as a long-term solution that combines social and economic benefits. This study looked at how emotional intelligence affects Bangladeshi recent graduates' intentions to pursue social entrepreneurship. This study observed that three of the four components of emotional intelligence- self-management, social awareness, and relationship management- were discovered to be the factors that determine whether someone will pursue a social entrepreneurial endeavor. Even though self-awareness was favorably connected to engage in social entrepreneurship, however, it was not a crucial, determining factor. The rationalization of the components that influence social entrepreneurial inclinations is sufficient since 66.6% of the adjusted R^2 value supports the perfect formulation of model that delineates acceptable relationship between emotional intelligence and social entrepreneurial intention.

Moreover, the findings of the article shed light on the critical role of emotional intelligence in driving intentions toward social entrepreneurship. By spotting the significance of emotional intelligence competencies and integrating them into educational and support programs, stakeholders can foster a vibrant ecosystem conducive to social innovation and positive societal impact.

The article's findings, particularly the non-significant association between self-awareness and social entrepreneurial intention, highlight the need for further research to explore the nuanced dynamics of emotional intelligence in the context of social entrepreneurship. Future studies could delve deeper into understanding the underlying mechanisms and boundary circumstances that moderate the nexus between emotional intelligence components and social entrepreneurial intentions, considering cultural, geographical, contextual, and individual differences. In addition to this concept, upcoming study could also examine the impact entrepreneurial education on empowering the emotional intelligence components to social entrepreneurial intentions. Furthermore, we recommend that future research may use longitudinal data and expand the sample to include multiple universities, thereby enhancing the robustness and generalizability of the results.

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Data availability statement

Data will be provided upon request

Disclosure of interest

Authors are declaring there is no Conflict of Interest.

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Appendix- A

This survey is part of my research to find the influence of personality traits and emotional intelligence on social entrepreneurial intention. Social entrepreneurship is doing business for a social cause. Information provided here will be used for academic purposes and will remain confidential. I appreciate your active participation and thank you in advance for your assistance and time.

Age: _____ Gender: Male Female
Religion: Muslim Hindu Buddhists Christian
Other (.....)

1. Do you intend to become an entrepreneur? Yes No
2. Are any of your family members (parents, grandfather, uncle, aunt, or sister) self-employed?
Yes No
3. Do any of your university classes train you to be an entrepreneur?
Yes No

Please use the following scale to rate each item: 1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=strongly agree

Code To what extent do you agree or disagree with the following statements?

- SEI-1 I am ready to do anything to be a social entrepreneur that helps society.
SEI-2 My professional goal is to be a social entrepreneur.
SEI-3 I will make every effort to start and run my own venture that helps society.
SEI-4 I am very determined to create a venture that helps society in the future.
SEI-5 I have very seriously thought of starting a firm that helps society in some way.
SEI-6 I have the firm intention to start a social venture someday.

Rank each statement as follows:

0 (Never) 1 (Rarely) 2 (Sometimes) 3 (Often) 4(Always)

- SE-1 My feelings are clear to me at any given moment
 - SE-2 Emotions play an important part in my life
 - SE-3 My moods impact the people around me
 - SE-4 I find it easy to explain my feelings
 - SE-5 My moods are easily affected by external events
 - SE-6 I can easily sense when I'm going to be angry
 - SE-7 I readily tell others my true feelings
 - SE-8 I find it easy to describe my feelings
 - SE-9 Even when I'm upset, I'm aware of what's happening to me
 - SE-10 I am able to stand apart from my thoughts and feelings and examine them
-
- SM-1 I accept responsibility for my reactions
 - SM-2 I find it easy to make goals and stick with them
 - SM-3 I am an emotionally balanced person
 - SM-4 I am a very patient person
 - SM-5 I can accept critical comments from others without becoming angry
 - SM-6 I maintain my composure, even during stressful times
 - SM-7 If an issue does not affect me directly, I don't let it bother me
 - SM-8 I can restrain myself when I feel anger towards someone
 - SM-9 I control urges to overindulge in things that could damage my well-being
 - SM-10 I direct my energy into creative work or hobbies
-
- SA-1 I consider the impact of my decisions on other people
 - SA-2 I can easily tell if the people around me are becoming annoyed
 - SA-3 I sense it when a person's mood changes
 - SA-4 I am able to be supportive when giving bad news to others
 - SA-5 I am generally able to understand the way other people feel
 - SA-6 My friends can tell me intimate things about themselves

SA-7 It genuinely bothers me to see other people suffer

SA-8 I usually know when to speak and when to be silent

SA-9 I care what happens to other people

SA-10 I understand when people's plans change

RM-1 I am able to show affection

RM-2 I am able to manage relationships well

RM-3 I find it easy to share my deep feelings with others

RM-4 I am good at motivating others

RM-5 I am a fairly cheerful person

RM-6 It is easy for me to make friends

RM-7 People tell me I am sociable and fun

RM-8 I like helping people

RM-9 Others can depend on me

RM-10 I am able to make someone else feel better if they are very upset