

Empathy and Social Entrepreneurial Intention: The Role of Social Entrepreneurial Self-efficacy and Institution Support Structure

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Abstract

The article aims to develop a comprehensive framework to explain how empathy impacts social entrepreneurial intention. Specifically, this article answers two questions: How does social entrepreneurial self-efficacy mediate the relationship between empathy and social entrepreneurial intention? and How is the nexus between empathy and social entrepreneurial intention moderated by institutional support structure? A sample of 502 university students in Vietnam was utilized to examine the research model. Hayes' PROCESS macro, especially Model 4 and Model 5, was respectively employed to estimate the mediating role of social entrepreneurial self-efficacy and the moderating effect of the institution's support structure in the nexus of empathy and social entrepreneurial intention. Our study found that empathy has a direct positive effect on social entrepreneurial intention. Furthermore, we discovered that this effect is amplified by social entrepreneurial self-efficacy and the support provided by institutions. Our findings shed light on the complex interplay between empathy, self-efficacy, and institutional support in shaping social entrepreneurial intention. This knowledge can help educators, policymakers, and aspiring entrepreneurs foster a more supportive and empathetic ecosystem for social innovation.

Keywords: Institutional support structure, Social entrepreneurial intention, Empathy, Social entrepreneurial self-efficacy.

JEL Classifications: L26

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1. Introduction

Social entrepreneurship is considered an innovative way to alleviate social problems like poverty, inequality, and institutional gaps in a nation (Erpf et al., 2019; Agostini et al., 2019; Aloulou & Algarni, 2022). Mair & Noboa (2006) considered social entrepreneurship as an important foundation for the sustainable development of countries. In the development of a country, solving social problems always leaves gaps because governments, commercial enterprises, and non-profit organizations do not meet the expectations of many related parties. Therefore, business activities to generate sustainable value and social justice are considered agents of innovation for society (Chiengkul et al., 2023). To some extent, starting a social enterprise is not just an economic activity; it is an activity that brings positive change solutions to society at times when we need them.

Because of that important role, plenty of research has been carried out to explore factors that lead to an individual's intention to establish a social venture. One of the factors mentioned in many studies is empathy. Empathy is the prerequisite personal trait to becoming a social entrepreneur (Mair & Noboa, 2006; Bacq & Alt, 2018; Ukil et al., 2023) and is an essential antecedent of the social aspect of social entrepreneurs. Although most prior studies illustrate that empathy has a positive effect on social entrepreneurial intention (Duong, 2023; Younis et al., 2020), some studies found different results. Some other studies indicate that empathy has no or even a negative effect (Sousa-Filho et al., 2020; Lacap et al., 2018; Hockerts, 2017). These mixed findings suggest that this relationship should be further investigated (Shepherd et al., 2023; Packard & Burnham, 2021). Furthermore, recent findings have indicated that empathy could also have an indirect impact on the intention to initiate a social enterprise (Ukil et al., 2023; Usman et al., 2021; Ip et al., 2020). In terms of the positive effects of empathy on social entrepreneurial intention, however, it remains unclear how this linkage is mediated by social entrepreneurial self-efficacy and moderated by institutional support structure. This issue needs to be further studied on the mechanisms through which empathy contributes to developing social entrepreneurial intention and the boundary conditions in the effect of empathy on social entrepreneurial intention. Thus, this study aims to fill this gap by exploring how the relationship between empathy and social entrepreneurial intention is mediated by social entrepreneurial self-efficacy and making clear the conditions under which empathy fosters social entrepreneurial intention. The findings of this study are expected to contribute to the literature on the link between empathy and social entrepreneurial intentions.

Gupta et al. (2020) argued that most studies about social entrepreneurship were conducted in developed countries but are still under-researched in the context of developing countries. Therefore, to test the research hypotheses, this study collected data from Vietnamese university students. Entrepreneurial activities in Vietnam have blossomed and grown tremendously in size and form since the economic renovation (Do, 2022; Le, 2022; Thi Tuyet Mai, 2019; Nguyen et al., 2016). However, social entrepreneurship has recently started to attract the attention of entrepreneurs and the government. Social enterprise is still a new concept and was not known to Vietnamese people before 2014. At that time, non-profit organizations, cooperatives, foundations, and associations were considered social enterprises. In 2014, the Vietnam Enterprise Law officially recognised social enterprises as a type of legal business organization. And this is a huge turning point for social enterprise in Vietnam. The most common goal of social enterprises in Vietnam is job creation. On average, each social enterprise in Vietnam

currently supports nearly 2,000 employees, mainly local people (British Council, 2019). The beneficiaries of these businesses are people with disabilities, long-term unemployment, or individuals with mental problems and learning abilities, such as children with autism and the elderly. Although considered a way to help the government solve the social burden, compared to the number of commercial enterprises, the number of social enterprises is still very modest (British Council, 2019). Therefore, to help increase social entrepreneurial activities in Vietnam, examining social entrepreneurial intentions is meaningful.

In sum, this study aims to clarify the relationship between empathy and social entrepreneurial intention in Vietnamese university students by answering two questions: How does social entrepreneurial self-efficacy mediate the relationship between empathy and social entrepreneurial intention? and How is the nexus between empathy and social entrepreneurial intention moderated by institutional support structure? The findings of this research expect to contribute to social entrepreneurship literature in two ways: (1) clarifying the relationship between empathy and social entrepreneurial intention in current social entrepreneurial literature; (2) investigating whether social entrepreneurial self-efficacy can serve as a mediator in the nexus between empathy and social entrepreneurial intention; and (3) examining the moderate role of institution support structure in the empathy-social entrepreneurial intention link.

2. Literature review and hypotheses development

2.1. Social entrepreneurship and social entrepreneurial intention

To date, social entrepreneurship does not have a consistent definition. While Zahra et al. (2009) defined social entrepreneurship as the activities and processes that create new ventures or innovatively manage existing businesses to increase the wealth of society, Björk et al. (2014) stated that social entrepreneurship is the action of persons or organizations who see spaces in the social system as a chance to assist disadvantaged groups by business form. It can be seen that the major distinction between social entrepreneurship and commercial entrepreneurship is the “social” aspect of social entrepreneurship. This aspect refers to actions that help marginalized people (Prabhu, 1999). In general, the concept of social entrepreneurship is related to creating a business with the ultimate aim of providing social benefits, which makes social entrepreneurship a key factor in the sustainable development of a nation (Mair & Noboa, 2006).

Previous studies have proven that intention is a crucial predictor of behaviours, therefore, to predict entrepreneurial behaviour, understanding intention and its antecedents is necessary since entrepreneurship is a planned behaviour. The intention to start a social business is a part of the social entrepreneurship process and a catalyst for the formation of social enterprises (Hockerts, 2015; Mair & Martí, 2006). Social entrepreneurial intention is defined as an individual's belief and willingness to establish a social venture.

In the realm of social psychology, the Theory of Planned Behavior of Ajzen (1991) is widely acknowledged as a significant contribution to comprehending why individuals act according to their beliefs and is widely applied in various human behaviors, including entrepreneurship. This theory posits that the immediate precursor of behavior is the intention to engage in that behavior, and this intention is influenced by three key factors: one's attitude toward the behavior (whether one holds a favorable or unfavorable view of performing a specific action), subjective norms (the perception of societal pressure to either perform or abstain from the behavior), and perceived

behavioral control (the perception of how easy or difficult it is to execute the behavior). While several previous studies have utilized TPB to elucidate SEI, Hockerts (2017) argued that the TPB model has limitations in explaining social entrepreneurial behavior as it doesn't account for the emotional and moral dimensions associated with such behavior. According to Mair & Noboa (2006), social entrepreneurship sets itself apart from for-profit entrepreneurship by addressing social concerns intertwined with emotions, ethics, and empathy. Consequently, it becomes imperative to take into consideration the emotional and empathetic components in the decision-making process for social entrepreneurship. Mair & Noboa (2006) proposed that intention to engage in social entrepreneurship is influenced by emotional and cognitive attitudes such as empathy, as well as by 'enabling' factors such as self-efficacy. Essentially, the social entrepreneurial intention model of Mair & Noboa (2006) was developed from the TPB model which empathy and social entrepreneurial self-efficacy serve as proxies for attitude toward behavior and external behavioral control, respectively (Hockerts, 2017).

2.2. Empathy and social entrepreneurial intention

Empathy is understood as an individual's ability to understand the emotions of others (Preston et al., 2007). Empathy can also be considered the natural capacity to know the feelings and emotions of others through witnessing their situation or simply imagining it (Decety & Jackson, 2004). In the social entrepreneurship context, empathy is an important quality of social entrepreneurs (Bacq & Alt, 2018) and is a key predictor of social entrepreneurial intention. Particularly, Mair & Noboa (2006) stated that empathy can shape the intention to establish a social enterprise since individuals with high empathy tend to behave in ways that benefit others. This argument was based on previous psychology studies that have demonstrated a positive correlation between empathy and helping behaviour (Bacq & Alt, 2018). Indeed, the aim of social enterprises is not to serve individual interests but to improve the welfare of others in need (Lacap et al., 2018). Therefore, empathic individuals may develop an intention to become social entrepreneurs as a way to help others overcome social issues (Mair & Noboa, 2006).

This proposition has been examined in prior studies. However, the results of the relationship between empathy and social entrepreneurial intention are still inconsistent (Ukil et al., 2023; Shepherd et al., 2023). While most studies illustrate that empathy has a positive effect on social entrepreneurial intention (Duong, 2023; Usman et al., 2021), some other studies indicate that empathy has no or even a negative effect on the intention to start a social business (Sousa-Filho et al., 2020; Lacap et al., 2018). The divergent results observed in these studies imply the need for a more thorough investigation of this relationship (Packard & Burnham, 2021). Therefore, this study argues that the effect of empathy on social entrepreneurial intention is mediated by social entrepreneurial self-efficacy. Also, the institution's support structure plays a moderate role in the nexus between empathy and the intention to become a social entrepreneur (see Figure 1).

2.3. Social entrepreneurial self-efficacy as a mediator

In this study, we proposed that the effect of empathy on social entrepreneurial intention is mediated by social entrepreneurial self-efficacy, which is individuals' confidence in their abilities and capabilities to take on social entrepreneurial tasks (Bacq & Alt, 2018). Particularly, social entrepreneurial self-efficacy differs from traditional entrepreneurial self-efficacy. While traditional entrepreneurial self-efficacy refers to individuals' belief in successfully performing general activities related to commercial goals and risk-taking, social entrepreneurial self-efficacy refers to their confidence in performing entrepreneurial tasks related to social benefits and sustainable development (Bacq & Alt, 2018).

By declining individuals' levels of visceral arousal when encountering challenging conditions such as those experienced by potential beneficiaries of social enterprise, empathy can lead to higher social entrepreneurial self-efficacy (Younis et al., 2020). Indeed, Bacq & Alt (2018) argued that individuals who can feel warmth and compassion for others in need are less likely to feel personal distress when facing others' experiences. Consequently, individuals with high levels of empathy are often more confident in their ability to help those in need via social entrepreneurship. Conversely, individuals who feel less warmth and compassion for others in need may experience a high degree of visceral arousal that results in the enhancement of their sense of vulnerability and decreases their social entrepreneurial self-efficacy (Bandura, 1982). Thus, the following hypothesis was proposed:

H1: Empathy is positively related to social entrepreneurial self-efficacy.

In addition, entrepreneurial self-efficacy is widely recognised as a crucial antecedent of the intention to start a business (Loan et al., 2021; Duong, 2021; Maheshwari & Kha, 2022; Yousaf et al., 2021). When an individual has high confidence in their entrepreneurial ability and capability, they are more likely to establish their own business (Krueger et al., 2000). Likewise, in social entrepreneurship, social entrepreneurial self-efficacy helps individuals identify the feasibility of forming a social business, thereby influencing their developing intention to become social entrepreneurs (Mair & Noboa, 2006). The positive relationship between social entrepreneurial self-efficacy and social entrepreneurial intention has been proven in several previous studies (Hassan, 2020; Ip et al., 2020; Zhang et al., 2021). Therefore, the following hypothesis was proposed:

H2: Social entrepreneurial self-efficacy is positively related to social entrepreneurial intention.

Giving a strong correlation between social entrepreneurial self-efficacy and both empathy and social entrepreneurial intention, as mentioned above, this study argues that social entrepreneurial self-efficacy mediates the effect of empathy on an individual's intention to become a social entrepreneur. Indeed, social entrepreneurial self-efficacy instills individuals with the confidence to undertake tasks and activities associated with social entrepreneurship. It plays a pivotal role in conveying the influence of empathy on individuals' intentions to develop social entrepreneurial aspirations (Younis et al., 2020, Ukil et al., 2023). Through the channel of social entrepreneurial self-efficacy, empathy becomes a powerful catalyst for forming social entrepreneurial intentions. Empathy, by augmenting individuals' awareness of social issues and their genuine desire to effect change, can enhance their social entrepreneurial self-efficacy (Bacq & Alt, 2018; Ip et al., 2020). This heightened self-efficacy, in turn, transforms empathy into concrete commitments and intentions to engage in social entrepreneurship. It bridges the gap between empathetic sentiments and actionable endeavors, elucidating the intricate interplay between cognitive and emotional factors in propelling individuals toward social entrepreneurial action. In other words, by bolstering social entrepreneurial self-efficacy, empathy exerts its impact on social entrepreneurial intentions, facilitating the assessment of information related to social issues and guiding individuals' sentiments towards the aspiration of assisting others (Youn et al., 2021). From the above arguments, the following hypotheses were proposed:

H3: The effect of empathy on social entrepreneurial intention is mediated by social entrepreneurial self-efficacy.

2.4. The institutional support structure as a moderator

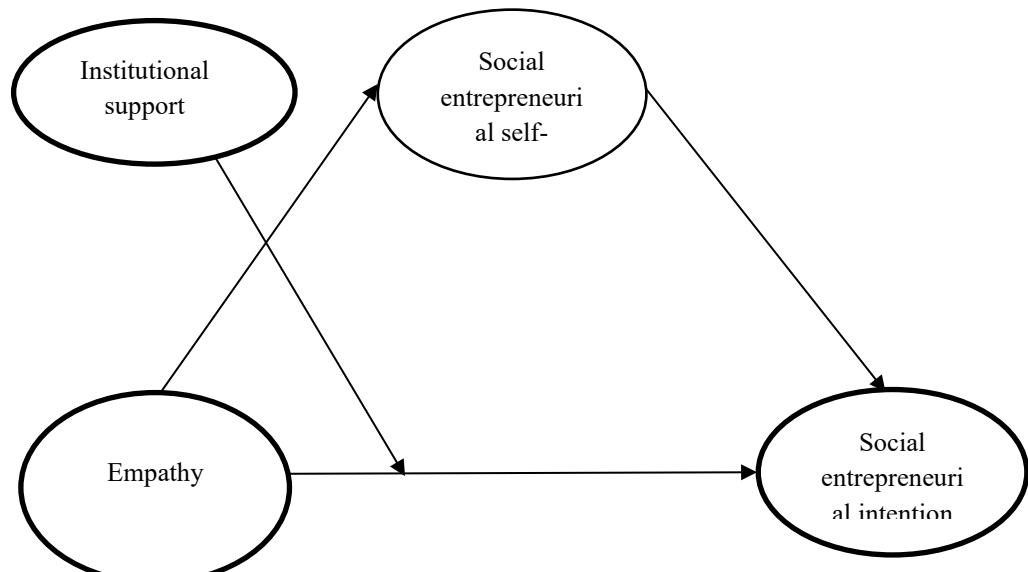
Institutional support structures refer to individuals' perceptions of the preference of rules and regulations for social entrepreneurship, local and state administration assistance, aid from financial organizations, and facilitating access to information and resources in the wider social economy (Nicholls, 2010). Several scholars have argued that institutional support is positively associated with motivation to engage in entrepreneurial activities (Nikiforou et al., 2020). Indeed, when individuals perceive a positive institutional environment, their confidence in their ability to become entrepreneurs will increase, thereby enhancing their entrepreneurial intentions (Turker & Sonmez Selcuk, 2009). Previous studies have demonstrated that institution support structure does not only directly and positively affect social entrepreneurial intention (Ghazali et al., 2021), but also indirectly affects intention to start a social business via feasibility and desirability (Urban & Kujinga, 2017). Some studies also reported that institutional support can play a moderator in the relationship between antecedents and social entrepreneurial intention (Lukman et al., 2020).

This article extends the literature by hypothesizing that institutional support structures may positively affect the linkage between empathy and social entrepreneurial intention. Specifically, when the institutional environment restricts the establishment of social enterprises, individuals will feel hesitant to start a social enterprise despite having high empathy, and instead, they will help disadvantaged people with other forms of charity such as charitable donations, building charity funds, etc. Conversely, when the institutional environment supports social entrepreneurial activities, these individuals may see starting a social venture as more feasible (Urban & Kujinga, 2017). Therefore, individuals are likely to transfer empathy into actual helping behaviours using social entrepreneurship.

Thus, this study proposes that institutional support structures can moderate the relationship between empathy and social entrepreneurial intention. A highly perceived institutional support structures may strengthen the effect of empathy on the intention to start a social business. Therefore, the following hypothesis is proposed:

H4: The institutional support structure positively moderates the relationship between empathy and social entrepreneurial intention.

Figure 1: Concept Model



Source: The figure by authors

In summary, this study has established a comprehensive framework for elucidating the influence of empathy on social entrepreneurial intentions. Within this framework, empathy not only exerts a direct impact on the intention to engage in social entrepreneurship but also indirectly affects it through the mediating factor of social entrepreneurial self-efficacy. Moreover, it is worth noting that the effect of empathy on social entrepreneurial intention can be strengthened by the supportive systems offered by institutions and organizations.

3. Methodology

3.1. Data collection and sample

Most entrepreneurship intention studies often sample university students because they are identified as a population with clear career intentions (Duong, 2021; Nowiński & Haddoud, 2019). Similarly, previous studies also suggested that studies of social entrepreneurial intention should use participants who have a high proclivity to become social entrepreneurs and are near or already facing career decisions (Bacq & Alt, 2018; Hockerts, 2017; Ip, Liang, Lai, & Chang, 2020). Therefore, this study collected data from university students in Vietnam to test the research model and hypotheses. The selection of university students is also reasonable because it provides valuable suggestions for educators to equip students with the capacity for social entrepreneurship (Ip, Wu, Liu, & Liang, 2018).

The study encompassed students hailing from the leading 5 public universities specializing in economics within the capital of Vietnam (Hanoi): the National Economics University, Academy of Finance, Thuongmai University, and the Foreign Trade University, Banking Academy. The selection of these universities was based on their substantial regional impact, the breadth of their academic offerings, and their potential influence on the development of future leaders and entrepreneurs. These educational institutions represent a fertile ground for recruiting students from diverse academic backgrounds, thereby nurturing a broad spectrum of viewpoints and ambitions about social entrepreneurship.

The data collection was carried out over three months (from July to October 2022). We proceeded to employ random selection methods to choose between four classes from each university, taking into account the specific academic disciplines represented in each institution. In each university, we sought authorization and support from professors at these universities to administer questionnaires directly to their student body. Students who chose to participate were presented with comprehensive information emphasizing the voluntary nature of their participation in the survey. We assured them that their responses would be exclusively utilized for academic purposes and would be handled with the utmost confidentiality. A total of 816 questionnaires were directly distributed to students. However, only 574 questionnaires were returned. 72 forms were removed due to a high percentage of in-compliance or conflicting opinions, therefore, the final sample included 502 responses.

In the final sample, more than half of the respondents were male (55.4%), and almost all respondents were between the ages of 21 and 24, accounting for 77.9%. In addition, the sample is balanced in terms of majors, with 48.8% of students majoring in economics and 51.2% of students majoring in other majors. However, only 25.2% of respondents reported that they had taken part in an entrepreneurial course. The characteristics of the collected sample are presented in Table 1.

Table 1: Descriptive Statistics of Sample Demographics

Demographic variables		Frequency	Percent
Gender	Male	278	55.4
	Female	224	44.6
Age	18-20	52	10.4
	21-24	391	77.9
	>24	59	11.8
Fields of study	Economics	245	48.8
	Non-economics	257	51.2
Did you take part in an entrepreneurship course	No	377	75.1
	Yes	125	24.9

Note: N=502

Source: Author's elaborations based on the research data

3.2. Measures

In this research, four variables were investigated, including empathy, institutional support structure, social entrepreneurial self-efficacy, and social entrepreneurial intention. All items measuring these variables were adapted from previous studies since they have been demonstrated to be valid and reliable.

Social entrepreneurial intention was measured using a four-item scale, where the first three items were adapted from Mair and Noboa (2006) and the last item was modified from Liñán and Chen (2009). Respondents indicate how likely they are to start up a social business at some point in the future (e.g., "I expect that at some point in the future, I will be involved in launching an organization that aims to solve social problems"). Each item was scored on a 5-point Likert scale (1 = total disagree, 5 = total agree), with higher mean scores indicating more intention to become a social entrepreneur.

Empathy was assessed by a three-item scale adapted from Hockerts (2017). Respondents stated the extent to which they understand others' feelings and emotions (e.g., "When thinking about socially disadvantaged people, I try to put myself in their shoes"). Each item was scored on a 5-point Likert scale (1 = total disagree, 5 = total agree), with higher mean scores indicating higher empathy.

Social entrepreneurial self-efficacy was measured with a three-item scale adapted from Hockerts (2017). Respondents stated the extent of confidence in their ability to perform social entrepreneurial tasks (e.g., "I could figure out a way to help solve the environmental issues"). Each item was scored on a 5-point Likert scale (1 = total disagree, 5 = total agree), with higher mean scores indicating more social entrepreneurial confidence.

Institutional support structure was measured with a four-item scale developed from the study of Dwivedi and Weerawardena (2018). Respondents stated the extent of their perceptions of the preference of rules and regulations for social entrepreneurship, local and state administration assistance, aid from financial organizations, and facilitating access to information and resources in the wider social economy (e.g., "Local and national governments have special support programs for social purpose organizations"). Each item was scored on a 5-point Likert scale (1 = total disagree, 5 = total agree), with higher mean scores indicating a perception of the more favourable institutional support structure.

3.3. Data analysis

The data analysis process consists of three steps to test the research hypotheses. First, this study employed Cronbach's Alpha test and confirmatory factor analysis (CFA) to examine the scales' reliability and validity. Next, due to the limitation of Cronbach's

alpha the assumption that all indicators observed have the same level of importance, the average variance extracted (AVE) and composite reliability (CR) were also performed to confirm the reliability of each construct. Finally, Hayes's SPSS PROCESS macro, Model 4, and Model 5 were respectively utilized to estimate the indirect effect of empathy on social entrepreneurial intention via social entrepreneurial self-efficacy and the moderate effect of institution support structure. In addition, gender, age, the field of study, and entrepreneurial education background were added as control variables to ensure the reliability of the analysis results.

4. Results

4.1. Descriptive Statistics

The descriptive statistics and correlation of the four main constructs in the research model are reported in Table 2. Social entrepreneurial intention is significantly and positively related to empathy ($r=0.530$, $p < 0.01$), institution support structure ($r=0.168$, $p < 0.01$), and social entrepreneurial self-efficacy ($r=0.380$, $p < 0.01$). Likewise, empathy is positively correlated to institution support structure ($r=0.164$, $p < 0.01$) and social entrepreneurial self-efficacy ($r=0.363$, $p < 0.01$), and institutional support structure is positively associated with social entrepreneurial self-efficacy ($r=0.145$, $p < 0.01$). In addition, Table 2 also shows that all variables are normally distributed since their Skewness and Kurtosis values range from -1 to 1 (Kline, 2016).

Table 2: The Results of Descriptive Statistics and Correlation

	Mean	S.D.	Skewness	Kurtosis	1	2	3	4
1. SEI	3.3855	1.1441	-0.393	-0.700	-			
2. EMP	3.8579	1.0125	-0.871	0.077	0.530**	-		
3. ISS	3.8690	0.9278	-0.913	0.352	0.168**	0.164**	-	
4. SES	4.0465	0.9226	-0.855	0.315	0.380**	0.363**	0.145**	-

Note: $N=502$, **: $p < 0.01$

Source: Author's elaborations based on the research data

4.2. Data analysis

Before testing research hypotheses, Cronbach's Alpha and confirmatory factor analysis (CFA) were conducted to evaluate measurement scales' reliability and convergent validity. The results showed that Cronbach's Alpha values of all variables were both higher than the threshold value (0.7), thus all scales have internal consistency (Hair et al., 1998).

In addition, the results of CFA generally exhibited a good level of fit with the data: $CMIN/df = 2.402$; $CFI = 0.968 > 0.95$, $SRMR = 0.038 < 0.08$; and $RMSEA = 0.053 < 0.06$ (Hu and Bentler, 1999). The results of CFA also illustrated that all observed variables have standardized regression weights higher than 0.5 (the lowest standardized regression weight is ISS4, 0.568); thus, all observed variables contribute to the explanation of latent constructs (Hu & Bentler, 1999). Besides, the composite reliability (CR) of each construct is higher than 0.7, and the average variance extracted (AVE) of all constructs is greater than 0.5 (see Table 3). Therefore, all measures have adequate reliability, convergent validity, and discriminant validity (Hair et al., 1998).

Table 3: Results of Measure Reliabilities and Validities

Items	Cronbach's Alpha	Standardized regression weights	CR	AVE
SEI				
SEI1		0.713		
SEI2	0.874	0.807		
SEI3		0.822	0.875	0.638
SEI4		0.847		
EMP				
EMP1		0.741		
EMP2	0.794	0.778	0.795	0.564
EMP3		0.733		
SES				
SES1		0.754		
SES2	0.866	0.911	0.867	0.686
SES3		0.813		
ISS				
ISS1		0.715		
ISS2	0.784	0.749	0.792	0.501
ISS3		0.755		
ISS4		0.568		

Note: N=502, CR: the composite reliability; AVE: the average variance extracted

Source: Author's elaborations based on the research data

4.3. The mediation role of social entrepreneurial self-efficacy

Table 4 presents the results of the regression analysis, which illustrates that social entrepreneurial self-efficacy partially mediates the effect of empathy on social entrepreneurial intention. The results indicate empathy has a positive impact on social entrepreneurial self-efficacy ($B = 0.3281$, $p < 0.001$), and social entrepreneurial self-efficacy positively influences social entrepreneurial intention ($B = 0.2677$, $p < 0.001$). Thus, H1 and H2 were supported by the data. In terms of the mediation effect, the results show that the total effect of empathy on social entrepreneurial intention is significant ($B = 0.5954$, $p < 0.001$). And when social entrepreneurial self-efficacy interjected the relationship between empathy and social entrepreneurial intention, the bootstrap CI of the indirect effect of empathy on social entrepreneurial intention ($B = 0.0878$; LLCI = 0.0475; ULCI = 0.1329) is entirely above 0, thus the indirect effect is significant (Hayes, 2018). Furthermore, the direct effect of entrepreneurial education on the intention to start a business is also significant ($B = 0.5076$; $p < 0.001$). Therefore, the link between entrepreneurial education and entrepreneurial intention was partially mediated by entrepreneurial self-efficacy, which supported H3.

Table 4: Results of the Mediation Effect Test (Unstandardized Regression)

Variables	Social entrepreneurial self-efficacy		Social entrepreneurial intention		B	SE
	B	SE	B	SE		
Empathy	0.3281***	0.0385				
<i>Total effect</i>						
Empathy			0.5954***	0.0434		
<i>Direct effects</i>						
Empathy			0.5076***	0.0452		

Variables	Social entrepreneurial self-efficacy		Social entrepreneurial intention		B	SE
	B	SE	B	SE		
Social entrepreneurial self-efficacy					0.2677***	0.0492
<i>Control variables</i>						
Gender ^a	0.0541	0.0787	0.0023		-0.0122	0.0863
Age ^b	0.0109	0.0825	-0.0092		-0.0121	0.0905
Field of study ^c	-0.0112	0.0778	-0.0756		-0.0726	0.0853
Entrepreneurial education ^d	0.0168	0.0896	0.0721		0.0676	0.0983
Indirect effect using bootstrap	0.0878 [0.0475; 0.1329] ^e		0.0213			
Total R ²	0.1329		0.2827		0.3231	
F	15.1989***		39.0910***		39.3736***	

Note: N= 502. a 1 = male, 2 = female; b Age: 1 = 18–20, 2 = 21–24, 3 = over 24; c 1 = Economics, 2 = Non-economics; d 1 = Have participated in entrepreneurial education, 2 = Haven't participated in entrepreneurial education; 95% bias-corrected confidence interval [LLCI; ULCI]. **p < 0.01; ***p < 0.001.

Source: Author's elaborations based on the research data

4.4. The moderate role of institution support structure

After testing the mediation effect, Model 5 in PROCESS macro (Hayes, 2018) was employed to examine the moderate role of institutional support structure.

As shown in Table 5, the interaction effect between empathy and institution support structure toward social entrepreneurial intention is positive and significant (BEMP*ISS-SEI = 0.1636, p < 0.001; 95% CI [0.0762; 0.2509]). The effect of empathy on social entrepreneurial intention is significant when the level of institutional support structure is low (-1SD), average (mean), or high (+1SD). This effect is stronger when institution support structure is higher (high, 1 SD above the mean; b = 0.6374, p < 0.001; 95% CI [0.5222; 0.7526]), declines when institution support structure is average (medium, at the mean; b = 0.5147, p < 0.001; 95% CI [0.4262; 0.6032]), and is lower when institution support structure is low (low, 1 SD below the mean; b = 0.3512, p < 0.001; 95% CI [0.2332; 0.4692]). Therefore, H4 was supported by the data.

Table 5: Results of Moderated Mediation Regression Analysis

	Social entrepreneurial intention		
	B	SE	95%CI
<i>Control variables</i>			
Gender ^a	-0.0095	0.0851	-0.1767; 0.1578
Age ^b	0.0118	0.0894	-0.1637; 0.1874
Field of study ^c	-0.0557	0.0843	-0.2214; 0.1099
Entrepreneurial education ^d	0.0624	0.0969	-0.1279; 0.2528
<i>Main effects</i>			
Empathy	-0.1395	0.1790	-0.4913; 0.2122
Social entrepreneurial self-efficacy	0.2627***	0.0487	0.1669; 0.3584
Institution support structure	-0.5426**	0.1740	-0.8874; -0.1978
<i>Interaction term</i>			
Empathy x Institution support structure	0.1636***	0.0444	0.0762; 0.2509
Total R ²	0.3452		
F	32.4870***		

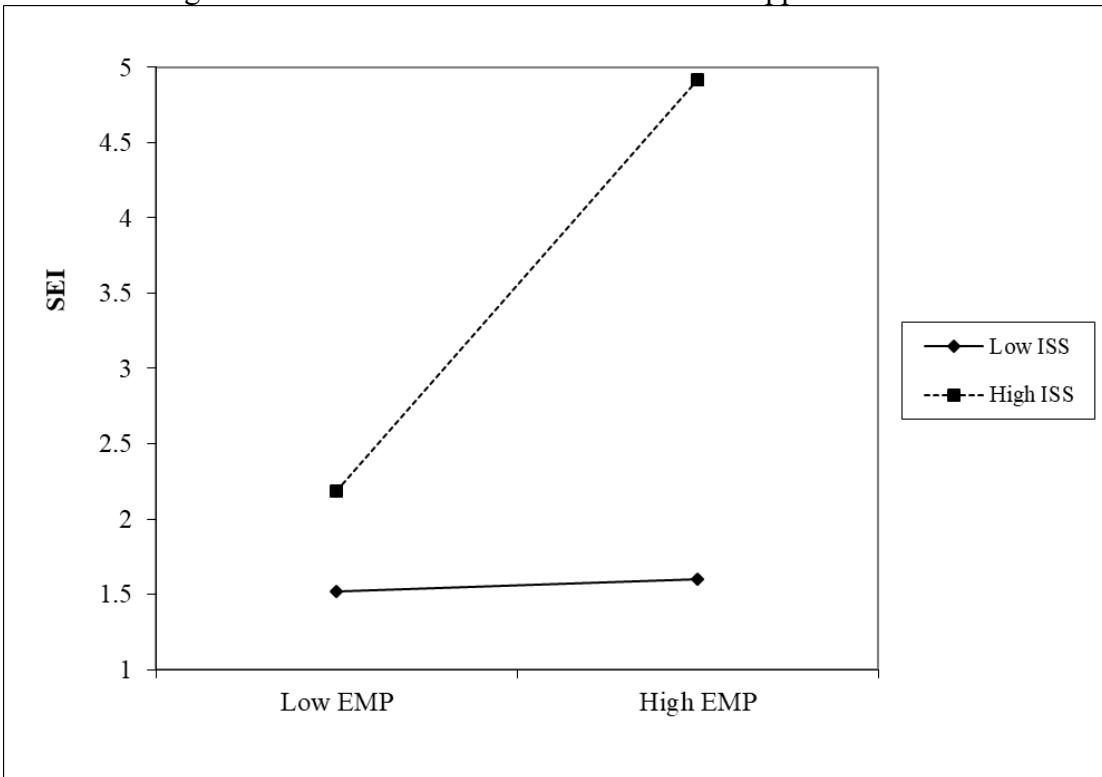
	Social entrepreneurial intention		
	B	SE	95%CI
<i>Conditional direct effect</i>			
Institution support structure 1 SD below the mean	0.3512***	0.0601	0.2332; 0.4692
Institution support structure at the mean	0.5147***	0.0450	0.4262; 0.6032
Institution support structure 1 SD above the mean	0.6374***	0.0586	0.5222; 0.7526

Notes: N= 502; a 1 = male, 2 = female; b Age: 1 = 18–20, 2 = 21–24, 3 = over 24; c 1 = Economics, 2 = Non-economics; d 1 = Have participated in entrepreneurial education, 2 = Haven't participated in entrepreneurial education; ***: $p < 0.001$; **: $p < 0.01$

Source: Author's elaborations based on the research data

Figure 2 illustrates that institutional support structure positively moderates the effect of empathy on social entrepreneurial intention. This means that institutional support structure could enhance the likelihood of transferring empathy into actual helping behaviours using social entrepreneurship.

Figure 2: The Moderate Effect of Institution Support Structure



Source: The figure by authors

5. Discussion

Recently, social entrepreneurship has been considered a tool for sustainable development in both developed and developing countries. The potency of social enterprises is much felt in developing countries, especially in Africa and Asia, where poverty and inequality are still widespread. While empathy is seen as an essential personal trait of a social entrepreneur, the findings about the relationship between empathy and social entrepreneurial intention are still inconsistent (Bacq & Alt, 2018;

Erturgut & Soysekerci, 2012; Tiwari et al., 2017). In addition, the mechanism by which empathy can drive social entrepreneurship intention remains unclear (Bacq & Alt, 2018; Miller et al., 2012). Therefore, recent studies called for more research on this nexus. To respond to these calls, this study proposed that empathy explains the intention to engage in social entrepreneurship through enhancing social entrepreneurial self-efficacy. In addition, this study defined institutional support structure as a boundary condition in the direct effect of empathy on social entrepreneurial intention.

First, this study supports a partially mediated relationship between empathy and the intention to form a social business. That is, the findings of this study illustrate that empathy has not only a positive direct effect on social entrepreneurial intention but also a positive indirect effect on social entrepreneurial intention via social entrepreneurial self-efficacy. This suggests that empathy plays an important role in determining social entrepreneurial intention. Indeed, to consider becoming a social entrepreneur, individuals need to have some personal traits that commercial entrepreneurs or other careers do not require (Younis et al., 2020). Furthermore, this study found that social entrepreneurial self-efficacy partially mediates the relationship between empathy and the intention to start a social venture. It means individuals with higher abilities to experience feelings of warmth and compassion for others in need are more likely to believe in their capabilities to perform specific tasks related to social entrepreneurship, which in turn develops their social entrepreneurial intention.

Second, this study found that, in addition, to the mediation effect of social entrepreneurial self-efficacy, the relationship between empathy and intention to engage in the social venture was positively moderated by institutional support structure. It means the existence of an institutional support structure can drive individuals' empathy for social entrepreneurial intentions. In contrast, when the level of institutional support structure is low, no matter how empathetic individuals are, their empathy is likely to less directly predict their intention to start a social business.

5.1. Theoretical and practical implications

The current study contributes to the social entrepreneurship literature in several ways. First, this study heeds recent calls for further studies to clarify the relationship between empathy and social entrepreneurial intention. The findings of this study add to the current social entrepreneurial intention literature by showing that empathy does not only directly impact the intention to engage in social entrepreneurship, but also indirectly impacts social entrepreneurial intention via social entrepreneurial self-efficacy. These findings help to confirm the essential empathy trait in developing the intention to become a social entrepreneur. Second, this study also determined the boundary condition for the direct influence of empathy on social entrepreneurial intention. Specifically, empathy is likely to develop the intention to form a social venture when an individual perceives the existence of an institutional support structure for social entrepreneurship.

In terms of practical implications, this study also provides some practical insights for educators and policymakers. First, the study results illustrate that empathy plays an important role in shaping the intention to establish social enterprises. Thus, educators and policymakers should have appropriate solutions to foster students' empathy. Scholars believe that the empathetic process can be trained through education (Bano et al., 2019, Chen et al., 2015). For example, opening classrooms with activities such as poverty simulations is a method to attract the attention of students to social issues and promote their empathy (Nickols & Nielsen, 2011). In addition, building a mechanism that encourages communication between different groups in society is also helpful (Younis et al., 2020). Students from different genders and racial and ethnic backgrounds can gather and engage in an open dialogue. Through such discussions, students can understand

different classes of society. By interacting and communicating with others from lower classes in society, students can become knowledgeable about deprivation and society's problems, thereby enhancing their empathy. Second, based on the positive and moderate role of the institution's support structure, this study suggests that policymakers should create a favourable legal framework to promote the establishment of social enterprises and develop and fulfill their mission in society.

5.2. Limitation and further direction

This study is not without limitations. Firstly, about research methodology, the data were collected only from Hanoi, the capital of Vietnam. Expansion of the research sample beyond big cities such as Ho Chi Minh City, Da Nang, and Hai Phong can increase the reliability of the sample. Secondly, this study only focuses on the factor of empathy, which may overlook the role of some other important factors such as moral obligation and prior experience. Thus, further studies can add other factors to provide an overview of social entrepreneurial intention. Thirdly, entrepreneurship literature has proved that there exists a gap between entrepreneurial intention and behaviour (Meoli et al., 2020; Neneh, 2019). This is also true in social entrepreneurship. Therefore, further studies should investigate social entrepreneurial behaviour to fill this gap. Fourth, in this study, institutional support structure is only examined as a moderator in the relationship between empathy and social entrepreneurial intention. Even though, it can moderate the relationship between other antecedents and social entrepreneurial intention (Lukman et al., 2020). Therefore, further studies could expand our conceptual model by exploring the moderate role of institutional support structure in the nexus of social entrepreneurial self-efficacy and intention. Finally, this study employed university students as survey participants, potentially introducing a bias toward those students already inclined toward or exposed to social entrepreneurship within the unique university environment. Future research endeavors have the potential to enrich our comprehension of social entrepreneurial intention across varied demographics and contexts. Such nuanced insights can inform the development of more informed policies and initiatives aimed at promoting social entrepreneurship within a broader societal spectrum.

6. Conclusion

Although empathy is seen as an essential personal trait of a social entrepreneur, the findings about the relationship between empathy and social entrepreneurial intention are still inconsistent. Therefore, this study advances the understanding of the complex dynamics underpinning social entrepreneurship. It highlights the pivotal role of empathy, both as a direct and indirect catalyst for social entrepreneurial intentions, and underscores the amplifying effect of the support system provided by institutions and organizations in facilitating the commitment of empathetic individuals to drive positive social change through entrepreneurial endeavors. These insights hold significant implications for educators, policymakers, and practitioners seeking to create an environment conducive to cultivating the next generation of empathetic social entrepreneurs, thus contributing to the betterment of society.

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References

Agostini, M.R., Bitencourt, C.C., & Vieira, L.M. (2019). Social innovation in Mexican coffee production: Filling 'institutional voids'. *International Review of Applied Economics*, 34 (5), 607-625.

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50 (2), 179-211.

Aloulou, W.J. & Algarni, E.A. (2022). Determinants of social entrepreneurial intention: empirical evidence from the Saudi context. *Social Enterprise Journal*, 18(4), 605-625.

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.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122-147.

Bano, S., Cisheng, W., Khan, A.N. & Khan, N.A. (2019). WhatsApp use and student's psychological well-being: Role of social capital and social integration. *Children and Youth Services Review*, 103(1), 200-208.

Björk, F., Hansson, J., Lundborg, D., & Olofsson, L. E. (2014). An ecosystem for social innovation in Sweden. *A strategic research and innovation agenda*. Lund: Lund University.

British Council, ESCAP, & CIEM. (2019). *Social enterprise in Vietnam*. Hanoi: British Council Vietnam. Retrieved from <https://www.britishcouncil.vn/sites/default/files/social-enterprise-in-vietnam.pdf>

Chen, A.M., Kiersma, M.E., Yehle, K.S. & Plake, K.S. (2015). Impact of the Geriatric Medication Game(R) on nursing students' empathy and attitudes toward older adults. *Nurse Education Today*, 35 (1), 38-43.

Chiengkul, W., Tantipanichkul, T., Boonchom, W., Phuangpornpitak, W. & Suphan, K. (2023). Social entrepreneurship of small and medium-sized entrepreneurs in Thailand: Influence of institutional environment, entrepreneurial passions, and entrepreneurial self-efficacy. *Social Enterprise Journal*, 19(4), 370-389.

Decety, J. & Jackson, P.L. (2004). The functional architecture of human empathy. *Behavioral and Cognitive Neuroscience Reviews*, 3 (2), 71-100.

Do, M.N. (2022). The key for success in the value chain of a social entrepreneur in Vietnam. *Journal of Enterprising Communities: People and Places in the Global Economy*, 17(6), 1193-1208.

Duong, C.D. (2021). Exploring the link between entrepreneurship education and entrepreneurial intentions: The moderating role of educational fields. *Education + Training*, 64(7), 869–891.

Duong, C.D. (2023). Karmic beliefs and social entrepreneurial intentions: A moderated mediation model of environmental complexity and empathy. *Journal of Open Innovation: Technology, Market, and Complexity*, 9 (1), 100022.

Dwivedi, A. & Weerawardena, J. (2018). Conceptualizing and operationalizing the social entrepreneurship construct. *Journal of Business Research*, 86(C), 32-40.

Erpf, P., Tekula, R. & Neuenschwander, J. (2019). Clustering social enterprises: An empirically validated taxonomy. *Social Enterprise Journal*, 15 (3), 397-420.

Erturgut, R. & Soysekerci, S. (2012). Social entrepreneurship effect on educational activity: The research in Turkey Universities. *Procedia - Social and Behavioral Sciences*, 46, 3954-3958.

Ghazali, E.M., Mutum, D.S. & Javadi, H.H. (2021). The impact of the institutional environment and experience on social entrepreneurship: A multi-group analysis. *International Journal of Entrepreneurial Behavior & Research*, 27 (5), 1329-1350.

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.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. Prentice Hall, Upper Saddle River, New Jersey.

Hassan, H. M. K. (2020). Intention towards social entrepreneurship of university students in an emerging economy: The influence of entrepreneurial self-efficacy and entrepreneurship education. *On the Horizon*, 28(3), 133-151.

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guilford Press.

Hockerts, K. (2015). The social entrepreneurial antecedents scale (SEAS): A validation study. *Social Enterprise Journal*, 11(3), 260-280.

Hockerts, K. (2017). Determinants of social entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 41(1), 105-130.

Hu, L., & Bentler, P. (1999). Cutoff criteria for fit indices in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.

Ip, C. Y., Liang, C., Lai, H. J., & Chang, Y. J. (2020). Determinants of social entrepreneurial intention: An alternative model based on social cognitive career theory. *Nonprofit Management and Leadership*, 31(4), 737-760.

Ip, C. Y., Wu, S.-C., Liu, H.-C., & Liang, C. (2018). Social entrepreneurial intentions of students from Hong Kong. *The Journal of Entrepreneurship*, 27(1), 47-64.

Kline, R. B. (2016). *Principles and practice of structural equation modeling*. New York, NY: Guilford publications.

Krueger, J. N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.

Lacap, J. P. G., Mulyaningsih, H. D., & Ramadani, V. (2018). The mediating effects of social entrepreneurial antecedents on the relationship between prior experience and social entrepreneurial intent. *Journal of Science and Technology Policy Management*, 9(3), 329-346.

Le, Q. H., Quach, M. H., & Tran, H. L. (2022). Credit composition and income inequality in Vietnam: An empirical analysis. *Journal of Economics and Development*, 24(4), 365-377.

Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617.

Loan, L. T., Doanh, D. C., Thang, H. N., Viet Nga, N. T., Van, P. T., & Hoa, P. T. (2021). Entrepreneurial behaviour: The effects of the fear and anxiety of Covid-19 and business opportunity recognition. *Entrepreneurial Business and Economics Review*, 9(3), 7-23.

Lukman, S., Bao, P. X., Kweku-Lugu, B., Arkorful, V. E., Latif, A., Gadabu, A., Sadiq, M. A. (2020). Diasporan students social entrepreneurship intention: The moderating role of institutional support. *Journal of Public Affairs*, 21(1).

Maheshwari, G., & Kha, K. L. (2022). Investigating the relationship between educational support and entrepreneurial intention in Vietnam: The mediating role of entrepreneurial self-efficacy in the theory of planned behavior. *The International Journal of Management Education*, 20(2).

Mair, J., & Martí, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36-44.

Mair, J., & Noboa, E. (2006). Social entrepreneurship: How intentions to create a social venture are formed. In J. Mair, J. Robinson, & K. Hockerts (Eds.), *Social Entrepreneurship* (1st ed., pp. 121-135). New York: Palgrave Macmillan.

Meoli, A., Fini, R., Sobrero, M., & Wiklund, J. (2020). How entrepreneurial intentions influence entrepreneurial career choices: The moderating influence of social context. *Journal of Business Venturing*, 35(3).

Miller, T. L., Grimes, M. G., McMullen, J. S., & Vogus, T. J. (2012). Venturing for others with heart and head: How compassion encourages social entrepreneurship. *Academy of Management Review*, 37(4), 616-640.

Neneh, B. N. (2019). From entrepreneurial intentions to behavior: The role of anticipated regret and proactive personality. *Journal of Vocational Behavior*, 112, 311-324.

Nguyen, T. L., Phan, H. M., & Bui, B. K. (2016). Liabilities and the impacts on financial performance of the Vietnamese listed small and medium-sized enterprises. *Journal of Economics and Development*, 18(3), 41-63.

Nicholls, A. (2010). The legitimacy of social entrepreneurship: Reflexive isomorphism in a pre-paradigmatic field. *Entrepreneurship Theory and Practice*, 34(4), 611–633.

Nickols, S. Y., & Nielsen, R. B. (2011). “So Many People are Struggling”: Developing social empathy through a poverty simulation. *Journal of Poverty*, 15(1), 22-42.

Nikiforou, A. I., Lioukas, S., & Voudouris, I. (2020). Network structure and firm-level entrepreneurial behavior: The role of market and technological knowledge networks. *Journal of Business Research*, 106, 129-138.

Nowiński, W., & Haddoud, M. Y. (2019). The role of inspiring role models in enhancing entrepreneurial intention. *Journal of Business Research*, 96, 183-193.

Packard, M. D., & Burnham, T. A. (2021). Do we understand each other? Toward a simulated empathy theory for entrepreneurship. *Journal of Business Venturing*, 36(1).

Prabhu, G. N. (1999). Social entrepreneurial leadership. *Career Development International*, 4(3), 140-145.

Preston, S. D., Bechara, A., Damasio, H., Grabowski, T. J., Stansfield, R. B., Mehta, S., & Damasio, A. R. (2007). The neural substrates of cognitive empathy. *Social Neuroscience*, 2(3-4), 254-275.

Shepherd, D. A., Seyb, S., & Williams, T. A. (2023). Empathy-driven entrepreneurial action: Well-being outcomes for entrepreneurs and target beneficiaries. *Journal of Business Venturing*, 38(2).

Sousa-Filho, J. M. d., Matos, S., da Silva Trajano, S., & de Souza Lessa, B. (2020). Determinants of social entrepreneurial intentions in a developing country context. *Journal of Business Venturing Insights*, 14.

Thi Tuyet Mai, N. (2019). An investigation into the relationship between materialism and green purchase behavior in Vietnam and Taiwan. *Journal of Economics and Development*, 21(2), 247-258.

Tiwari, P., Bhat, A. K., & Tikoria, J. (2017). Predictors of social entrepreneurial intention: An empirical study. *South Asian Journal of Business Studies*, 6(1), 53-79.

Turker, D., & Sonmez Selcuk, S. (2009). Which factors affect entrepreneurial intention of university students?. *Journal of European Industrial Training*, 33(2), 142-159.

Ukil, M. I., Almashayekhi, A., & Ullah, M. S. (2023). Feeling compassion and responsible but not starting a social venture: role of empathy and moral obligation in social entrepreneurial intention. *Society and Business Review*, 19(1), 132-154.

Urban, B., & Kujinga, L. (2017). The institutional environment and social entrepreneurship intentions. *International Journal of Entrepreneurial Behavior & Research*, 23(4), 638-655.

Usman, S., Masood, F., Khan, M. A., & Khan, N. u. R. (2021). Impact of empathy, perceived social impact, social worth and social network on the social entrepreneurial intention in socio-economic projects. *Journal of Entrepreneurship in Emerging Economies*, 14(1), 65-92.

Youn, H., Xu, J., & Kim, J.-H. (2021). Consumers' perceptions, attitudes and behavioral intentions regarding the symbolic consumption of auspiciously named foods. *International Journal of Hospitality Management*, 98.

Younis, A., Xiaobao, P., Nadeem, M. A., Kanwal, S., Pitafi, A. H., Qiong, G., & Yuzhen, D. (2020). Impact of positivity and empathy on social entrepreneurial intention: The moderating role of perceived social support. *Journal of Public Affairs*, 21(1).

Yousaf, U., Ali, S. A., Ahmed, M., Usman, B., & Sameer, I. (2021). From entrepreneurial education to entrepreneurial intention: A sequential mediation of self-efficacy and entrepreneurial attitude. *International Journal of Innovation Science*, 13(3), 364-380.

Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24(5), 519-532.

Zhang, Y., Trusty, J., Goroshnikova, T., Kelly, L., Kwong, K. K., McGuire, S. J. J., . . . Tang, R. (2021). Millennial social entrepreneurial intent and social entrepreneurial self-efficacy: A comparative entrepreneurship study. *Social Enterprise Journal*, 17(1), 20-43.

Appendix

Table I. The measures

Code	Items
Social entrepreneurial intention - SEI	
SEI1	I expect that at some point in the future I will be involved in launching an organization that aims to solve social problems
SEI2	I have a preliminary idea for a social enterprise on which I plan to act in the future
SEI3	I plan to start a social enterprise
SEI4	My professional goal is becoming an entrepreneur
Empathy - EMP	
EMP1	When thinking about socially disadvantaged people. I try to put myself in their shoes
EMP2	Seeing socially disadvantaged people triggers an emotional response in me
EMP3	I feel comparison for socially marginalized people
Social entrepreneurial self-efficacy - SES	
SES1	I am convinced that I personally can make a contribution to address societal challenges if I put my mind to it
SES2	I could figure out a way to help solve the problems that society faces
SES3	Solving societal problems is something each of us can contribute to
Institution support structure - ISS	
ISS1	Local and national governments have special support programs for social purpose organizations
ISS2	There are sufficient institutional support structures to assist social purpose organizations
ISS3	There is adequate information available on social needs that need to be addressed
ISS4	We have access to sufficient resource support from financial institutions