



Modelling social entrepreneurial intention among university students in Bangladesh using value-belief-norm framework

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Abstract

While the public sector authorities and governments struggle to ensure socioeconomic balance at all levels of society, social entrepreneurship is widely known as the optimum solution to societal issues, such as unemployment, social disparities, and ecological imbalances. Despite the fact that the younger generation holds the highest potential to be future social entrepreneurs, a few studies have been conducted to explore the factors that influence their social entrepreneurial intentions (SEI) in developing countries, such as Bangladesh. Furthermore, the empirical studies based on the value-belief-norm (VBN) theory for addressing SEI were scarce in the existing literature. The study aims to measure the influence of Altruistic Values (AV), Traditional Values (TV), Personal Normative Beliefs (NB), Awareness of Consequences (AC), Ascription of Responsibility (AR), Personal Norms (PN), and Social Norms (SN) on SEI implementation of the VBN framework. A combination of web-based and hardcopy surveys was used to collect data from 797 students of higher educational institutes in Bangladesh. The hypotheses and associations between the factors were statistically analysed using structural equation modelling. As a result, it was demonstrated that AV and TV had a notable influence on NB. Similarly, NB showed a significant positive impact on PN and AC, while AC and AR were reported to have a substantial influence on PN. Finally, PN and SN showed a strong impact on SEI. The holistic social entrepreneurship model proposed in this study should be effective for socioeconomic development by incorporating commercially feasible and sustainable principles. Overall, the study findings would assist researchers, current social entrepreneurs and organisations, educational institutes, government agencies, and individual potential entrepreneurs with accurate knowledge and insight to construct their strategies and efficiently pursue social ventures.

Keywords Social Entrepreneurial Intention · VBN theory · University students

Introduction

Developing effective and long-term solutions to several societal issues, including the components of successful entrepreneurship and innovation, is extremely challenging. The challenges of well-being in shaping social development have become the top priority due to the sheer monetary and non-monetary deprivation, which affects a large proportion of the world population (Chaarani, 2021). Despite the efforts by corporate giants, governments, international agencies, and charitable organisations to address social issues, socioeconomic inequalities still persist in developing countries (Hossain et al., 2020). In the field of economic research, social entrepreneurship is regarded as a crucial topic (Tiwari et al., 2017). The activities of social entrepreneurship may well be characterized as commercial and non-commercial efforts which might result in the development of business prospects involving social welfare (Hockerts, 2017). Social

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entrepreneurship is widely acknowledged as one of the most viable approaches to effectively addressing a variety of social and environmental issues (Chikha & Jarboui, 2016). Social entrepreneurship is also regarded as one of the most important areas for employment generation, which contributes to the countermeasure against discrimination and promotes economic growth (Loku et al., 2018).

In developing countries where social and economic imbalances still exist, social entrepreneurship is important (Tiwari et al., 2017). In contrast to a commercial enterprise, a social venture allocates the majority of its resources to solve social issues while ensuring a sustainable economic model rather than relying on donations and grants (Miller et al., 2012). Therefore, the possible roots of social entrepreneurship include the growth of the private sector (Tiwari et al., 2017). Moreover, due to the deficiencies in governmental support in solving social issues, social entrepreneurship is becoming a strong motivator for socio-economic development in underdeveloped nations (Chaarani, 2021). Thereby, it is appropriate to assert that social entrepreneurship originates in developing countries as a result of the public sector's incapability and inadequate provision to stimulate socio-economic growth and the government's bureaucratic nature to adopt novel strategies for meeting societal needs (Urban & Gaffurini, 2018).

Surprisingly, most of the social entrepreneurship research works mainly originated from European or Western economies (Tiwari et al., 2017). Doherty et al. (2014) examined 129 publications on social entrepreneurship, which revealed that only 16.2% of the articles were published outside of Europe and North America. Although this review did not necessarily imply a smaller quantity of studies in APAC, particularly in comparison to Africa, America, the Middle East, and Russia, it encourages thorough investigations and analysis of APAC nations social entrepreneurial research (Sengupta and Sahay, 2017). Bangladesh was one of the pioneering countries in social entrepreneurship (Bornstein & Davis, 2010). For instance, BRAC, one of the world's oldest and largest social enterprises was founded in 1972 with the objective of reducing poverty, empowering women, establishing social equality, and granting education to the underprivileged (Ahmed et al., 2013). Following that, one of the world's most successful and oldest social organisations, Grameen Bank Bangladesh was founded in the late 1970s, which introduced the concept of microcredit and microfinance to assist poor villagers in raising capital for their businesses (Osburg, 2013). Despite the fact that Bangladesh has established several renowned social enterprises, there is a paucity in the existing literature relating to social entrepreneurial intention and its importance to economic growth (Hossain et al., 2020; Lee et al., 2021).

Students is the key human capital that possesses the strongest potential in developing global sustainability

standards and procedures that place a balanced emphasis on economic, ecological, and societal issues (Shahverdi et al., 2018). After the students' graduation, they need to choose a career path to ensure that they are recognised as prospective entrepreneurs with the potential to establish their independent enterprises (Staniewski & Awruk, 2015). Compared to the existing social entrepreneurs, students are more likely to be diverse in their social entrepreneurship aspirations (Urban & Gaffurini, 2018). In spite of the few social entrepreneurial studies performed in the Bangladesh context, no prior study was conducted on university students to assess social entrepreneurial intentions. Therefore, to address these preceding population gaps in the existing literature, this study selected university students in Bangladesh as a target population.

The influences of social circumstances on social entrepreneurial intentions have received extremely little attention in the literature (Stirzaker et al., 2021). On the other hand, only the attitudinal characteristics such as personality traits, big five personalities, and emotions were identified as the core antecedents of social entrepreneurship intention (SEI) in earlier studies (Clark et al., 2018; Miller et al., 2012; Ruskin et al., 2016; Irengün & Arkboga, 2015), a scarce amount of empirical analyses were conducted to determine the effects of traditional values, personal normative beliefs, awareness of consequences, and ascription of responsibilities on SEI development. Furthermore, considering that the objective and nature of commercial entrepreneurship are not the same as social entrepreneurship, Mair and Nobao (2006) argued that situational elements are the key factors for a complete understanding of the process of SEI creation. This study identified a knowledge gap in establishing a model that blends the personal, traditional, and social level values, beliefs, and norms to induce the decision-making process of pursuing social entrepreneurship. To bridge all the preceding theoretical and empirical research gaps, this current study conducted an empirical investigation by underpinning Value-Belief-Norm (VBN) theory to recognise the crucial antecedents of SEI among university students in Bangladesh. In summary, the study's novel objectives, which would contribute to the current knowledge of social entrepreneurship:

1. Theoretical expansion: this study has expanded the VBN model with three subjective factors, including traditional values, normative beliefs (at the personal level), and social norms.
2. Empirical evaluation of theory: To the best of the researchers' knowledge, this is the first study to underpin VBN theory and empirically evaluate the model in the context of social entrepreneurial intention.
3. Geographical and demographic context: This study is one of the first to thoroughly examine the social entrepreneurial intention among Bangladeshi university students, which has previously gone unexplored.

The research would serve as a representation of the contemporary social entrepreneurship landscape in a developing country setting, where social injustice, prejudice, and poverty still exist and people suffer, especially during times of crisis. The study also emphasised the need to strengthen students' perceived belonging to their community as well as their own personal standards and moral duties in order to reduce social inequities. The study's results would provide precise understanding and knowledge for academic researchers, established social organisations, educational institutions, government organizations, and interested individuals to build their strategies to encourage social entrepreneurship among youngsters.

The next section of this paper is organised into six sections. Section 1 comprises a review of the literature as well as the study's theoretical foundation and hypotheses. Section 2 outlines the methodological techniques employed in this study, while Sect. 3 documents the data analysis and results. A thorough discussion of the research findings is included in Sect. 4. On the basis of the study findings, Sect. 5 highlights the theoretical and practical implications. Finally, Sect. 6 concludes with a synopsis, a few study limitations, and recommendations for further research.

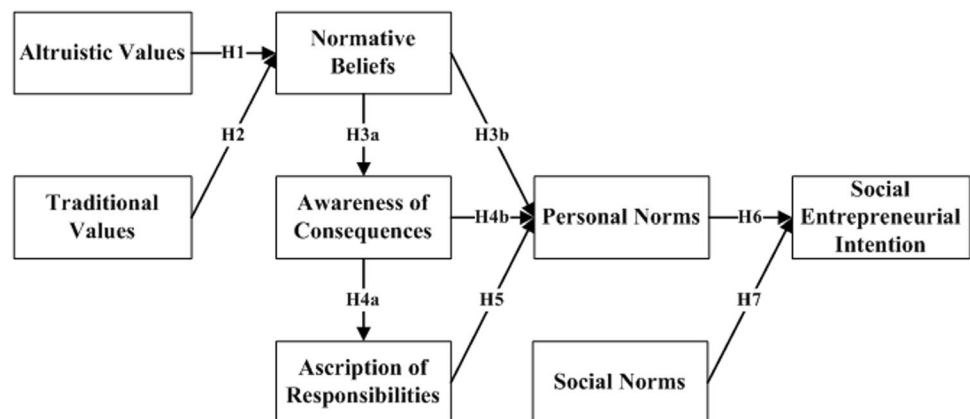
Literature review

Theoretical background

The widely implemented theories for the understanding of Social entrepreneurial intention and sustainable entrepreneurship include the Theory of Planned Behaviour (TPB) (Tiwari et al. 2017; Vuorio et al., 2018; Yasir et al., 2021). Another theoretical foundation that has been a successful model in analysing SEI is Mair and Noboa's (2006) social entrepreneurial intention model (SEI model) implemented

by numerous researchers (Ernst, 2011; Hockerts, 2017; Rambe & Ndofirepi, 2021). While only a few researchers included the Norm Activation Theory (NAT) in conjunction with TPB to study sustainable entrepreneurship (Thelken & Jong, 2020), the Value-Belief-Norm (VBN) theory has yet to be fully adopted to empirically investigate decision-making processes in pursuing social entrepreneurship as a career, according to the researchers' knowledge. Individual elements of the VBN theory, such as Altruistic Values (Vuorio et al., 2018; Thelken & Jong, 2020), personal normative beliefs (Stren et al., 1999; Jafarkarimi et al., 2016), future consequences (Thelken & Jong, 2020; Yasir et al., 2021b), the ascription of social responsibility (Silva et al., 2021; Lukman et al., 2021), and moral consideration (Hockerts, 2017; Rambe & Ndofirepi, 2021) were studied as independent constructs in separate studies. However, the consolidation of all the components and complete correlation of the factors of the VBN model are yet to be implemented in the context of Social entrepreneurial intention and the decision-making process. Furthermore, social and sustainable entrepreneurship are the key types of entrepreneurship, which have been developed over time to address and resolve critical societal issues by sharing several common constructs (Yasir et al., 2021a). Considering that sustainable entrepreneurship scholars mostly support the VBN theory, it is extremely important to include factors from the VBN theory and possibly other socio-psychological factors that may directly impact specific forms of social movement endeavours (Stren et al., 1999). Therefore, the current study recognised the significance of integrating factors from the VBN theory and a few additional components (e.g., Traditional Values, Social Norms) in an attempt to empirically evaluate the social entrepreneurial intention among young students in Bangladesh. Figure 1 presents the research framework, which includes all of the observing components and their respective associations founded on VBN theory.

Fig. 1 Research framework



Social entrepreneurship and Social Entrepreneurial Intention (SEI)

Social entrepreneurship is a business concept that combines the goal to earn a profit to achieve a good social impact (Miller et al., 2012). Choi and Majumdar (2014) highlighted that some researchers considered social enterprise as the establishment of social values through establishments with profits generated for serving the poor and/or without profits. A common consensus across the literature is that social enterprises are hybrid entities with dual purposes of social value creation and market orientation to achieve economic and social wealth (Bacq & Alt, 2018; Doherty et al., 2014).

The term “intention” is related to an individual’s psychological orientation and determination to succeed and improve the understanding of people’s decision-making process to begin any endeavour (Liñán & Fayolle, 2015). Social entrepreneurial intention (SEI) determines whether or not an individual is willing to start a social enterprise in near future (Bacq & Alt, 2018). Similar to commercial entrepreneurs, social entrepreneurs acquire their intentions to establish a social venture while obtaining the perception of viability and desirability, including the inclination to perform (Lukman et al., 2021). According to Mair and Noboa (2006), the presence of empathy and moral judgment triggers the perceptions of desirability. Following that, self-efficacy and social support develop perceived feasibility. Numerous academics have identified different personal, social, environmental, religious, and cultural constructs that impact the development of SEI (Mair & Noboa, 2006; Hockerts, 2017; Tiwari et al., 2017; Bacq & Alt, 2018; Silva et al., 2021; Rambe & Ndofirepi, 2021; Lukman et al., 2021).

Altruistic values (AV)

Altruistic value is described as a personal value structure that drives individuals to participate in activities for the well-being of others or the overall society (Schwartz, 1992). In the context of social initiatives, altruism may not imply physically manifested compassion or emotional bond in all cases, but rather the psychological, intellectual, and/or practical assistance to accomplish community goals (Tsatsou, 2018). Scholars identified numerous forms of altruistic values including empowering others in the community (Ernst, 2011), sharing resources, assisting them (Chan-Serafin et al., 2013), being generous, and showing compassion to them (Roundy & Evans, 2017). Studies demonstrated that when commercial entrepreneurs gain financial profits from commercial endeavours, social entrepreneurs selected empathy-based altruism for social well-being (Yasir et al., 2021a). Moreover, altruistic values are strongly related to the enhancement of socio-economic and socio-environmental circumstances (Vuorio et al., 2018). Social entrepreneurs

prioritise altruistic motives over any other benefits in their mission due to the belief that enhancing social states may bring ultimate profits in their social endeavours (Rambe & Ndofirepi, 2021). Earlier research on sustainable, social, and environmental entrepreneurship showed a strong correlation between altruistic values and the formation of supportive beliefs (Vuorio et al., 2018; Hockerts, 2015; Mair & Noboa, 2006). Therefore, this study suggested the following hypothesis:

H1. Altruistic values have a positive effect on normative beliefs.

Traditional values (TV)

Traditional values have been demonstrated by Schwartz (1992) as the devotion to, respect for, and adoption of the rituals and ideology imposed by one’s community, culture, family, and religion. According to Ndubisi et al. (2016), honesty and integrity are the dimensions of traditional values. Thus, the current study characterised traditional values as the individuals’ ethical, humanitarian, loyal, supportive, dutiful, and respectful social behaviour toward others that reflect their family, religion, and societal customs. Similar to traditional entrepreneurs, social entrepreneurs, are perpetually subjected to competitive pressures, financial stress, and shareholder expectations, which could have a detrimental impact on their proclaimed morals and ethics to act as per traditional values (Wong & Ip, 2021). Certain conservative social movements use traditional values such as respect and familial loyalty to attempt to elicit sentiments of personal normative beliefs (Stren et al., 1999). Numerous scholars acknowledged that social entrepreneurs have an intrinsic normative belief to be traditionally ethical in their moves and behaviours (Chell et al., 2014). Besides, ethical beliefs and traditional values may align with cultural orientations that symbolise a whole country normative structures (Pathak & Muralidharan, 2020). The arguments and rationalities from the existing literature led to the development of the following hypothesis in this study:

H2. Traditional values have a positive effect on normative beliefs.

Normative beliefs (NB)

In the context of social movements, Stren et al. (1999) defined personal normative beliefs as individuals’ expectations of what should be the moral obligations and responsibilities of people, groups, enterprises, and governments to support social changes. According to Cialdini and Goldstein (2004), normative belief denotes the type of descriptive beliefs that could impact individuals’ attitudes toward

learning by watching other people's activities and realising the possible consequences of violating a norm. Bicchieri (2016) argued that consciousness phase helps to transform individual normative beliefs that increase awareness of the adverse consequences brought on by people's activity or inactivity. Given that social norms and normative beliefs are frequently used interchangeably in research, a considerable risk of confusion is present. Hence, to examine the discrepancies in assertions regarding the effect of Social Norms and Personal Normative Beliefs in the context of ethical conduct, Jafarkarimi et al. (2016) incorporated personal normative beliefs in addition to social norms to explore their function in individuals' behavioural intention. Following the normative practices, it is morally essential to be selfless, be considerate to others, or show gratitude to ensure that conscientiousness could be an affirmation of moral sensibilities and social duty (Pathak and Muralidharan, 2020). Hence, personal norms emerge as a result of deliberately adhering to normative beliefs to comprehend societal inequalities. The existing literature assertions and standpoints prompted the current study to propose the following hypotheses:

H3a. Normative beliefs have a positive effect on awareness of consequences.

H3b. Normative beliefs have a positive effect on personal norms.

Awareness of consequences (AC)

The recognition of consequences is the recognition that one's actions have an influence on the well-being of others (Han et al., 2018). The AC is linked to responsibility attribution and also activates personal norms (Nguyen et al., 2021). Yasir et al. (2021a, b) argued that individuals who reasonably observe the future consequences of the inactivity in addressing societal issues may form a moral mindset toward sustainable entrepreneurship due to their feeling of responsibility to resolve other people's difficulties by sacrificing their own frequent benefits. People's perceptions of the dreadful and uncertain consequences of any critical catastrophe lead to the emergence of profound responsibilities of helping others around them in the community (Mahmud et al., 2020). Numerous areas were identified by researchers regarding social inequalities, including health disparities (Westin, 2017), educational inequalities (Milošević & Krstić, 2017), and job inequalities, which would inevitably result in socio-economic imbalances that self-reproduce subsequent disparities and generate moral compulsion among people to diminish those (Milošević & Krstić, 2017; Van Dijk et al., 2020). A recent study on social entrepreneurship revealed that entrepreneurs also encounter the consequences of socio-historical, class, and racial inequalities, which strongly demotivate them from pursuing entrepreneurial

responsibilities (Neville et al., 2017). According to Thelken and Jong (2020), realisations of the future adverse consequences of socio-environmental imbalances appear to have a strong influence on responsibility development among people and increased positive attitudes regarding sustainable entrepreneurship. Accordingly, the following hypotheses were proposed based on earlier discussions:

H4a. Awareness of consequences has a positive effect on the ascription of responsibility.

H4b. Awareness of consequences has a positive effect on personal norms.

Ascription of responsibility (AR)

The process through which a person takes responsibility for his or her actions is defined as the ascription of responsibility (Han et al., 2018). When an individual recognises the repercussions of his or her actions or inaction and is willing to accept responsibility for those, his or her personal norms will be activated (Kwon et al., 2020). Social responsibility is the obligation and proclivity to conform to socially accepted principles by providing necessary support to the underprivileged segment (Hustinx et al., 2010). Individuals' beliefs about what actions they could perform to promote social welfare are associated with social responsibility (Păceșilă, 2018). Individuals' personal norms are stimulated by their socially responsible interactions (Stukas et al., 2014). These moral obligations are extended to all spheres of social activities (Păceșilă, 2018). When being confronted with an unpredictable catastrophe that results in an economic and social recession, it is logical to build a sense of social responsibility to cultivate moral norms in dealing with social crises (Mahmud et al., 2020; Silva et al., 2021). Recent research works presented adequate empirical evidence where the ascription of social responsibility has a substantial association with the intention to engage in social entrepreneurship (Silva et al., 2021; Lukman et al., 2021). Therefore, to strengthen SEIs, measures should be taken to instil the aspirations of social responsibility within youth (Lukman et al., 2021). In view of the prior studies and the significance of AR in the formation of personal norms, the current study proposed the following hypothesis:

H5. Ascription of responsibility has a positive effect on personal norms.

Personal norms (PN)

The personal norm is reflected through an individual's realisation that his or her activities may have positive or negative consequences for others to which they are willing to respond accordingly based on their values and norms (Kwon et al.,

2020). Personal norms get triggered when individuals perceive that their social involvement serves others and they are responsible for the negative repercussions of their lethargy (Nguyen et al., 2021). Personal norms in regard to social entrepreneurship denote the extent to which social entrepreneurs are completely dedicated to their initiatives and feel moral obligations to constantly pursue those endeavours (Beugré, 2016; Hockerts, 2015) outlined personal norms as the views of moral obligations that are present between the activity of moral assessment and the establishment of moral conviction. Tiwari et al. (2017) argued that moral obligation is the fundamental factor that distinguishes social entrepreneurs from commercial entrepreneurs. Hockerts (2015) reported that social entrepreneurs have the moral urge to aid marginalised populations, considering that personal norms are anchored between social expectations for their behaviour and their own value judgments. Based on the findings by Lukman et al. (2021), people who feel a strong moral responsibility to serve others are more inclined to perform social work on philanthropic grounds. As an antecedent, the personal norm is critical for social entrepreneurs as it indicates that the purpose of facing any social problem is the morally correct action to be performed (Tiwari et al., 2017). Thus, this study aims to evaluate personal norms as a basic criterion for becoming a social entrepreneur. Thereby, the following hypothesis was developed to support the explanation in the existing literature:

H6. Personal norms have a positive effect on social entrepreneurial intention among young students in Bangladesh.

Social norms (SN)

Social norms denote individuals' interpretations of recommendations and points of view from other important people around them regarding whether or not to partake in a particular activity (Ajzen, 1991). According to Hockerts (2015), social norms indicate that social entrepreneurs own a moral responsibility to assist underprivileged communities. For instance, recent research observed that the norms and practices adopted by a significant number of Buddhist entrepreneurs develop influence and power, encouraging non-Buddhist entrepreneurs to adopt similar trends in their social activities (Xu et al., 2021). While social entrepreneurship scholars argue that social norm is a weak element due to inconsistent results, the majority of investigations have been identified with measurement errors as contributing factors to these poor outcomes (Ernst, 2011). Yang et al. (2015) investigated the differences in the notion of social entrepreneurship across two distinct cultures (e.g., the United States and China), and observed that subjective norms had a stronger influence on China compared to the United States.

According to Tiwari et al. (2017), in collectivist countries, citizens are deeply tied to family and communities, and the exerted force from family members and surrounding people strongly influences the process of decision-making in pursuing social entrepreneurship. Furthermore, Bangladesh is a low-income country with strong family bonding, which indicates that a significant priority should be given to the social norm as family, friends, and numerous other individuals in a community may influence individuals' decision-making processes in pursuing social entrepreneurship. Accordingly, this study established the following hypothesis based on earlier study findings and recommendations:

H7. Social norms have a positive influence on social entrepreneurial intention among young students in Bangladesh.

All these hypothesised associations are presented in Fig. 1.

Methodology

Population and sample

The target population of this study comprised university students in Bangladesh aged between 18 and 40 years old. As recommended by Hair et al. (2021), a sample size of 200 to 400 is suitable for structural equation modelling (SEM) analysis. However, to avoid complications from the low sample size, this study intended to collect data from more than 500 respondents. A convenience sampling approach was adopted as it allows the selection of responders from any segments of the population that are easily reachable (Edgar & Manz, 2017).

Data collection

A combined strategy involving an online and structured survey was used to collect data. To illustrate, many students at public higher education institutions in Bangladesh have inadequate access to the internet, which has led to the necessity to collect their responses by distributing the questionnaire. The URL for the online questionnaire was sent via e-mail and other online platforms (e.g., WhatsApp, Facebook, Facebook Messenger, Viber, and IMO). A structured questionnaire was distributed to libraries and other common premises of randomly selected public universities, including Dhaka University, Chittagong University, Rajshahi University, and National University (eight colleges under National University, including Narayanganj Government Girls College, Habibullah Bahar Government College, Government Shahid Suharwardy College, Government Kazi Nazrul

College Dhaka, Tejgaon Government College, Government Eden Mohila College, Government Tolaram College, and Government Titumir College). Data were collected from December 1, 2021, until December 30, 2021, from a total of 878 respondents (663 via online and 215 via structured survey). Subsequently, 797 replies were deemed complete and acceptable for further data analysis. Participants' personal information was assured to be treated with stringent confidentiality. Participation in this survey was entirely voluntary.

Measurement items

The questionnaire was constructed by customising previously validated questionnaires to match the study context. Throughout the questionnaire, the use of unambiguous, precise, and unbiased phrasings was applied to ensure that the participants found it enjoyable and responded to it enthusiastically to express their views. To assess altruistic values, traditional values, normative beliefs, awareness of consequences, and ascription of responsibilities, all the questionnaire items were adapted from Stern et al. (1999). The items to gauge personal norms were adopted from Unal et al. (2018), followed by the evaluation of social norms using the items designed by Doran and Larsen (2015). Five questions derived from Ruiz-Rosa et al. (2020) were used to determine social entrepreneurial intention. The responses from the participants were gathered using a 5-point Likert scale.

Multivariate normality

Web Power, a statistical web tool, was used in this study to examine "multivariate skewness and kurtosis" and the multivariate normality issue. As a result, the data in this study was found to not be normally distributed, considering that multivariate kurtosis and multivariate skewness showed p -values of 0.00, which met the $p < 0.05$ cutoff recommended by Cain et al. (2017).

Data analysis methods

As a result of non-normality issues, this study implemented Partial Least Squares-Structural Equation Modelling (PLS-SEM) using SmartPLS (V.3.3.5). PLS-SEM is extensively used to examine path correlations with latent variables, considering that it is a non-parametric and multivariate technique (Hair et al., 2017). Furthermore, PLS-SEM is also recommended for exploratory research when the research framework is complex and includes mediating or moderating components (Hair et al., 2017). The current study was an exploratory approach that included multiple independent variables at various levels and was meant to explore the mediating effects between multiple parameters. Therefore,

PLS-SEM was considered the ideal data analysis method for this study.

Data analysis and result

Demographic details

Based on the demographic characteristics of the respondents (Table 1), 60.9% accounted for male respondents, while 39.1% were represented by female respondents. More than half of the respondents (55.0%) were aged between 22 and 25 years old, 24.0% were aged between 26 and 30 years old, 17.2% aged between 18 and 21 years old, and the remaining respondents (3.9%) aged between 26 and 40 years old. In terms of marital status, 82.2% of respondents were unmarried, while the rest were married (17.6%). More than half (55.7%) of the participants are from private higher educational institutes, while the remaining participants (44.3%) are from a private university. The majority of participants (64.2%) held a Bachelor's degree, followed by 35.8% of the respondents who are Master's degree holders. Most of the students took social science (55.8%), while the other students enrolled in applied science (44.2%).

Common method bias

Harman's single-factor test was conducted to evaluate the presence of the common method variance issue, considering that it is a widely performed method to validate that the study model is not significantly impacted by CMV (Chang et al., 2010). The single-component explained 26.49% of the variation, which was less than the 50% maximum threshold suggested by Podsakoff et al. (2012), demonstrating that common method bias was not an issue in the current study data. This study also conducted a full collinearity test as recommended by Kock (2015). As shown in Table 2, VIF values in this study (ranging from 1.403 to 1.991) were below 3.3 (Kock, 2015), demonstrating the absence of common method bias in this study data set.

Measurement model validation

Hair et al. (2017) suggested that, before assessing the structural model, the measurement model be evaluated. Accordingly, to assure the measurement model's robustness, the outer model is assessed for internal consistency and reliability, convergent validity, and finally discriminant validity. To measure the validation of the model, this study used Cronbach's alpha, Dijkstra-Hensle's rho, composite reliability, and average variance extracted (Andreev et al., 2009; Almeida et al., 2013; Malarvizhi et al., 2022). During the model validation process, this study dropped

Table 1 Demographic characteristics

	n	%		n	%
Gender			Age Group		
Male	485	60.9	18–21 years	137	17.2
Female	312	39.1	22–25 years	438	55.0
Total	797	100.0	26–30 years	191	24.0
			31–35 years	25	3.1
			36–40 years	6	0.8
Marital Status			Total	797	100.0
Single	655	82.2	Institute		
Married	140	17.6	Private Higher Education Institutes	444	55.7
Divorced	1	0.1	Public Higher Education Institutes	353	44.3
Widowed	1	0.1	Total	797	100.0
Total	797	100.0	Education		
			Study Area		
Bachelor degree or equivalent	512	64.2	Applied Science	352	44.2
Master degree	285	35.8	Social Science	445	55.8
Total	797	100.0	Total	797	100.0

Table 2 Full collinearity test

Variables	VIF
Altruistic values	1.403
Traditional values	1.381
Normative beliefs	1.934
Awareness of consequences	1.786
Ascription of responsibility	1.991
Personal norms	1.782
Social norms	1.843
Social entrepreneurial intention	1.889

Source: Author's data analysis

the factors with loadings less than 0.65 to establish the convergent validity and discriminant validity of the study. According to Chin et al. (1997), the indicators of loading values would be greater than 0.60. Hence, this study's overall loadings of indicators have achieved their threshold value, which is greater than 0.60 (Table 5).

Due to the significance of uncertainty estimates in analytical data, several applications have been proposed in the literature to estimate uncertainty in multivariate analysis, including re-sampling using the bootstrapping method and linearization-based methods (Zhang & Garcia-Munoz, 2009). However, there are not many instances in the literature where the uncertainty of multivariate standardisation models, like the partial least squares (PLS) technique, has been assessed (Faber, 2002). Olivieri et al. (2006) explore the main approaches for multivariate standardisation uncertainty estimation. This study used the bootstrapping method to assess the uncertainty of the applied analysis

(Almeida et al., 2013) and hypothesis relationships in the model.

Internal consistency and convergent validity

Cronbach's alpha, Dijkstra-Hensele's rho, and composite reliability are used to assess the internal consistency of constructs, with values higher than 0.70 indicating robust internal consistency and reliability (Hair et al., 2019). The values of Cronbach's Alpha (ranging from 0.701 to 0.805), Dijkstra-Hensele's rho (ranging from 0.710 to 0.805), and composite reliability (ranging from 0.816 to 0.865) were reported to be higher than the criterion of 0.7 for all the constructs in this current study, as shown in Table 3. This result has proven the model's high dependability and internal consistency. The average variance extracted (AVE) assesses convergent validity by determining how much variance in the constructs could be explained by the latent variables (Hair et al., 2017) suggested that AVE values should be higher than 0.5 to ensure that the model and its elements possess substantial convergent validity. The AVE values shown in Table 3 ranged from 0.501 to 0.640, which fulfilled the threshold criteria and demonstrated adequate convergent validity.

Discriminant validity

The Fornell-Larcker criterion, the Heterotrait-Monotrait (HTMT) ratio, and cross-loadings are widely used to obtain a thorough understanding of the model discriminant validity. Putting the Fornell-Larcker criterion into consideration, the square root of the AVE value of a construct should be

Table 3 Validity and reliability

Variables	Cronbach's alpha	Dijkstra-Hensele's rho	Composite reliability	Average variance extracted
Altruistic values	0.720	0.724	0.842	0.640
Traditional values	0.756	0.759	0.836	0.506
Normative beliefs	0.707	0.710	0.819	0.532
Awareness of consequences	0.701	0.711	0.816	0.526
Ascription of responsibility	0.752	0.755	0.834	0.501
Personal norms	0.756	0.757	0.845	0.577
Social norms	0.757	0.761	0.838	0.511
Social entrepreneurial intention	0.805	0.805	0.865	0.562

Source: Author's data analysis

higher than the variances of any other latent variables in the row and column where it is present (Hair et al., 2017). As shown in Table 4, the Fornell-Larcker criterion values of all constructs in this current study were found to be higher than any correlations in the relevant column and row where the values were present. According to Henseler and Sarstedt (2013), to achieve strong discriminant validity, all HTMT values of all constructs should amount to less than 0.90. Table 4 demonstrates that HTMT values for all components (between 0.280 and 0.821) were within the threshold.

Cross-loading was assessed to compare the construct outer loadings. According to scholars, all loadings should be higher than 0.60 (Chin et al., 1997). As shown with a

bold italic font in Table 5, all of the construct factor loadings were reported to exceed or be nearly equal to the suggested threshold. Therefore, the construct high discriminant validity has been proven by all three methods of validity tests in this current research.

Structural model validation

Hair et al. (2017) suggested the use of path coefficient (beta values-β), coefficient of determination (r^2), effect size (f^2), and predictive relevance (Q^2) to assess the structural model. To test the hypotheses, this study calculated *p*-values, *t*-values, and path coefficients for each correlation using the

Table 4 Discriminant validity

	AV	TV	NB	AC	AR	PN	SN	SEI
Fornell-Larcker criterion								
AV	0.800							
TV	0.474	0.711						
NB	0.383	0.335	0.729					
AC	0.210	0.283	0.586	0.725				
AR	0.238	0.280	0.561	0.551	0.708			
PN	0.259	0.265	0.463	0.431	0.535	0.760		
SN	0.163	0.216	0.447	0.491	0.558	0.485	0.715	
SEI	0.229	0.295	0.427	0.403	0.514	0.579	0.575	0.749
Heterotrait-Monotrait Ratio (HTMT)								
AV								
TV	0.638							
NB	0.531	0.453						
AC	0.280	0.380	0.821					
AR	0.320	0.367	0.758	0.750				
PN	0.350	0.351	0.624	0.587	0.707			
SN	0.223	0.289	0.609	0.671	0.738	0.646		
SEI	0.304	0.376	0.558	0.533	0.660	0.740	0.736	

Note: AV: Altruistic Values, TV: Traditional Values, NB: Normative Beliefs, AC: Awareness of Consequences, AR: Ascription of Responsibility, PN: Personal Norms; SN: Social Norms, SEI: Social Entrepreneurial Intention

Source: Author's data analysis

Table 5 Loading and cross-loading

Code	AV	TV	NB	AC	AR	PN	SN	SEI
AV2	0.816	0.414	0.330	0.204	0.216	0.199	0.134	0.167
AV5	0.778	0.403	0.279	0.117	0.175	0.193	0.096	0.207
AV6	0.806	0.322	0.307	0.175	0.178	0.229	0.157	0.181
TV1	0.305	0.695	0.209	0.193	0.198	0.178	0.175	0.226
TV2	0.313	0.673	0.226	0.187	0.153	0.198	0.119	0.148
TV3	0.350	0.733	0.224	0.221	0.204	0.181	0.152	0.197
TV5	0.407	0.736	0.273	0.210	0.241	0.187	0.164	0.248
TV6	0.299	0.717	0.249	0.193	0.194	0.199	0.160	0.224
NB2	0.314	0.242	0.741	0.434	0.477	0.429	0.472	0.452
NB4	0.273	0.222	0.732	0.401	0.393	0.280	0.294	0.258
NB5	0.229	0.230	0.682	0.428	0.349	0.299	0.298	0.265
NB6	0.293	0.279	0.759	0.447	0.406	0.327	0.227	0.250
AC1	0.153	0.172	0.404	0.718	0.370	0.305	0.409	0.309
AC2	0.228	0.280	0.521	0.784	0.447	0.349	0.425	0.315
AC4	0.136	0.186	0.421	0.729	0.425	0.326	0.295	0.295
AC5	0.069	0.166	0.333	0.667	0.347	0.261	0.286	0.247
AR1	0.069	0.146	0.298	0.348	0.692	0.352	0.407	0.371
AR2	0.184	0.238	0.463	0.430	0.748	0.418	0.477	0.431
AR3	0.222	0.244	0.405	0.357	0.711	0.368	0.361	0.372
AR4	0.197	0.184	0.420	0.434	0.710	0.400	0.403	0.346
AR5	0.165	0.175	0.385	0.371	0.676	0.349	0.314	0.295
PN1	0.172	0.200	0.312	0.335	0.417	0.750	0.418	0.373
PN2	0.213	0.196	0.417	0.359	0.409	0.770	0.394	0.441
PN3	0.162	0.213	0.323	0.334	0.440	0.772	0.358	0.462
PN4	0.238	0.197	0.351	0.280	0.362	0.746	0.310	0.479
SN1	0.085	0.117	0.336	0.361	0.420	0.334	0.693	0.401
SN2	0.060	0.137	0.266	0.370	0.384	0.350	0.762	0.428
SN3	0.101	0.159	0.314	0.322	0.396	0.351	0.766	0.424
SN4	0.118	0.127	0.317	0.362	0.392	0.352	0.746	0.416
SN5	0.227	0.240	0.373	0.341	0.402	0.347	0.592	0.381
SEI1	0.127	0.188	0.299	0.318	0.367	0.433	0.487	0.763
SEI2	0.180	0.206	0.282	0.314	0.383	0.434	0.442	0.738
SEI3	0.139	0.193	0.358	0.275	0.399	0.414	0.402	0.743
SEI4	0.181	0.239	0.317	0.322	0.385	0.441	0.429	0.740
SEI5	0.235	0.283	0.348	0.279	0.397	0.448	0.389	0.762

Note: AV: Altruistic Values, TV: Traditional Values, NB: Normative Beliefs, AC: Awareness of Consequences, AR: Ascription of Responsibility, PN: Personal Norms; SN: Social Norms, SEI: Social Entrepreneurial Intention

Source: Author's data analysis

bootstrapping approach. Hence, the r^2 statistic is used to measure the model performance (Andreev et al., 2009; Tran et al., 2022). Based on Table 6, the hypothesis test results were revealed through the bootstrapping technique. As per the analysis, altruistic values were found to have a significant influence on normative beliefs with $\beta=0.289$, $t=7.627$, and $p<0.001$. The result indicated that hypothesis H1 was supported. While hypothesis H2 postulated that traditional values had a substantial positive influence on Normative Beliefs, with the statistical figures of Traditional Values

($\beta=0.198$, $t=4.818$, $p<0.001$), the bootstrapping result supported the prediction. Normative Beliefs was found to have a noteworthy positive influence on Awareness of Consequences ($\beta=0.586$, $t=23.224$, $p<0.001$) and Personal Norms ($\beta=0.377$, $t=10.377$, $p<0.001$), which confirmed that both hypotheses H3a and H3b were supported. Similarly, the Awareness of Consequences was reported to have a robust effect on Ascription of Responsibility ($\beta=0.551$, $t=17.770$, $p<0.001$) and Personal Norms ($\beta=0.319$, $t=7.937$, $p<0.001$). Thus, hypotheses H4a and H4b were

Table 6 Hypothesis testing

Hypo	Direct Effects	CI-MIN	CI-MAX	Beta	<i>t</i> -value	<i>p</i> -value	Decision
H ₁	AV→NB	0.218	0.343	0.289	7.627	<0.001	Supported
H ₂	TV→NB	0.135	0.266	0.198	4.818	<0.001	Supported
H _{3a}	NB→AC	0.547	0.629	0.586	23.224	<0.001	Supported
H _{4a}	AC→AR	0.499	0.599	0.551	17.770	<0.001	Supported
H _{3b}	NB→PN	0.316	0.433	0.377	10.377	<0.001	Supported
H _{4b}	AC→PN	0.253	0.386	0.319	7.937	<0.001	Supported
H ₅	AR→PN	0.297	0.441	0.363	8.273	<0.001	Supported
H ₆	PN→SEI	0.324	0.447	0.393	10.299	<0.001	Supported
H ₇	SN→SEI	0.325	0.445	0.289	7.627	<0.001	Supported

Note: AV: Altruistic Values, TV: Traditional Values, NB: Normative Beliefs, AC: Awareness of Consequences, AR: Ascription of Responsibility, PN: Personal Norms; SN: Social Norms, SEI: Social Entrepreneurial Intention CI-MIN: Confidence Interval Lower Level at 95% bias corrected and CI-MAX: Confidence Interval Upper Level at 95% bias corrected

Source: Author's data analysis

Table 7 Coefficient of determination (r^2)

Variables	R square	R square adjusted	Explanatory power
Normative beliefs	0.304	0.303	Weak
Awareness of consequences	0.344	0.343	Weak
Ascription of responsibility	0.177	0.175	Weak
Personal norms	0.333	0.331	Weak
Social entrepreneurial intention	0.449	0.447	Weak

Note: r^2 value interpretation (≥ 0.75 - Significant, ≥ 0.50 - moderate, ≥ 0.25 - Weak) (Hair et al., 2019)

accepted. Similarly, Ascription of Responsibility showed a strong and substantial impact on Personal Norms ($\beta = 0.363$, $t = 8.273$, $p < 0.001$), supporting hypothesis H5. Personal Norms and Social Norms were found to have a considerable positive influence on Social Entrepreneurial Intention, which ensured statistically significant values ($\beta = 0.393$, $t = 10.299$, $p < 0.001$) and ($\beta = 0.289$, $t = 7.627$, $p < 0.001$), respectively. Overall, the results supported hypotheses H6 and H7. Most notably, the lower level (CI-MIN) and upper level (CI-MAX) of the confidence intervals for all the associations demonstrated that the value 0 (zero) did not fall within the intervals, confirming that all the hypotheses were fully supported (Kock, 2016).

The coefficient of determination

The coefficient of determination (r^2) denotes the degree of explained variances, which is the proportion of the variation in the dependent variable explained by a linear model. Endogenous latent variables with r^2 values of 0.75, 0.50, or 0.25 are classified as significant, moderate, or weak, respectively (Hair et al., 2019). Table 7 presents the r^2 values for

constructs. The r^2 value of NB (0.303) indicated that the exogenous components, AV and TV, explained 30.3% of the variation in NB, which indicated the lack of explanatory power. Similarly, the r^2 values for AC (34.3%), AR (17.5%), PN (33.1%), and SEN (44.7%) demonstrated minimal explanatory power in the model.

The effect size (f^2)

The effect size (f^2) measures the substantial influence of exogenous factors on endogenous variables based on the particular variance rather than their shared variance (Hair et al., 2010). Cohen (2013) categorised the magnitude of the impacts as insignificant (0.02), minor (≥ 0.02), medium (≥ 0.15), and significant (≥ 0.35). Considering that the features of the framework and study domain vary, ensuring that the rules of thumb are suitable for achieving a prominent effect size may be challenging (Hair et al., 2021). The results of the effect size assessment are shown in Table 8. The effect size of NB on AC (0.524) and effect size of AC on AR (0.437) were recorded substantial. The effects of PN on SEN and SN on SEN were found to be medium (0.214 and 0.205), while the remaining effect size was considered to have minor effects on the respective endogenous constructs.

The predictive relevance (Q^2)

The Q^2 test was developed to assess the predictive significance of endogenous variables, which determine whether the exogenous factors surpass endogenous factors in terms of predictive power (Stone, 1974). The value of Q^2 should be higher than zero for the exogenous variables to be predictive of the endogenous variables (Hair et al., 2017). Based on Table 9, all of the endogenous components have predictive relevance values higher than zero ($Q^2 > 0$), confirming that the model has profound predictive power and relevance.

Table 8 Effect size (f^2)

Associations	f^2	Effect size
AV→NB	0.079	Small
TV→NB	0.037	Small
NB→AC	0.524	Substantial
AC→AR	0.437	Substantial
NB→PN	0.031	Small
AC→PN	0.012	Trivial
AR→PN	0.121	Small
PN→SEI	0.214	Medium
SN→SEI	0.205	Medium

Note1: AV: Altruistic Values, TV: Traditional Values, NB: Normative Beliefs, AC: Awareness of Consequences, AR: Ascription of Responsibility, PN: Personal Norms; SN: Social Norms, SEI: Social Entrepreneurial Intention

Note2: f^2 score interpretation (≥ 0.35 - substantial effect size, ≥ 0.15 - medium effect size, ≥ 0.02 - small effect size and < 0.02 - trivial effect size) (Cohen, 2013)

Table 9 Predictive relevance (Q^2)

Variables	SSO	SSE	$Q^2(= 1-SSE/SSO)$
Normative beliefs	3188.000	2896.309	0.091
Awareness of consequences	3188.000	2624.440	0.177
Ascription of responsibility	3985.000	3390.368	0.149
Personal norms	3188.000	2586.334	0.189
Social entrepreneurial intention	3985.000	2997.343	0.248

Note: $Q^2 > 0$ is significant (Hair et al., 2017)

Multi-group analysis

The model was evaluated using multi-group analysis (MGA) to gain a more in-depth review and comprehension. The PLS-MGA performs analysis on the subgroup heterogeneity and is one of the most effective approaches for evaluating moderation across several correlations instead of a single correlation (Hair et al., 2017). Before PLS-MGA, measurement invariance is established to examine the validity of the effects. In this case, the Measurement Invariance of Composite Models (MICOM) technique is applied in the research to assess homogeneity among two groups.

In this study, the ‘Applied Science’ and ‘Social Science’ study discipline groups were evaluated for MGA invariance (Group (1) Applied Science, and Group (2) Social Science). The measurement item invariance was validated by demonstrating configurable and compositional variances. Table 10 presents the permutation p-values of all constructs that contain values higher than 0.05, which has proven the measurement invariances among the analysed groups. Subsequently, the path coefficient values from the PLS-MGA analysis were examined. It was found that except for AR to PN, all of the p-values for study discipline group differences exceeded 0.05 (as shown in Table 10). Therefore, it was concluded that the data of the two research groups showed no statistically significant differences in any associations except for AR to PN.

Discussion

The current study used the VBN theory to investigate the relationship of normative beliefs with altruistic values and traditional values, the relationship of personal norms with normative beliefs, awareness of consequences, and ascription of responsibility, and the relationship of social

Table 10 Multi-group analysis

Association	Applied science		Social science		Difference		Permutation p-value	Decision
	Beta	p-value	Beta	p-value	Beta	p-value		
AV→NB	0.296	<0.001	0.292	<0.001	0.004	0.483	0.971	No Difference
TV→NB	0.200	0.001	0.195	<0.001	0.005	0.466	0.948	No Difference
NB→AC	0.545	<0.001	0.624	<0.001	-0.079	0.068	0.168	No Difference
AC→AR	0.524	<0.001	0.575	<0.001	-0.051	0.203	0.424	No Difference
NB→PN	0.142	0.008	0.229	<0.001	-0.086	0.154	0.329	No Difference
AC→PN	0.097	0.059	0.142	0.008	-0.045	0.295	0.627	No Difference
AR→PN	0.455	<0.001	0.288	<0.001	0.167	0.031	0.067	Small Difference
PN→SEI	0.373	<0.001	0.398	<0.001	0.041	0.295	0.593	No Difference

Note: AV: Altruistic Values, TV: Traditional Values, NB: Normative Beliefs, AC: Awareness of Consequences, AR: Ascription of Responsibility, PN: Personal Norms; SN: Social Norms, SEI: Social Entrepreneurial Intention

Source: Author’s data analysis

entrepreneurial intention with personal norms and social norms. Based on the specified relationships presented in the research framework, all of the direct correlations and indirect effects were reported to be positive and significant. Moreover, a multi-group analysis of the respondents' study discipline found no significant differences between applied science and social science. In light of the previously existing literature, the logical explanation for the acquired results is thoroughly analysed in the following section.

The AV was reported to have had a significant favourable effect on NB. This result was in line with recent studies (Vuorio et al., 2018; Thelken & Jong, 2020), which demonstrated the prominence of AV in the resolution of socio-environmental challenges. The probable reasons for this finding may be expressed as young students being highly conscious of maintaining equal rights for all people in society, since Bangladesh is a country with high societal disparities and economic challenges. Furthermore, the recent lockdown during the COVID-19 pandemic caused significant hardship for the underprivileged, which significantly increased people's altruistic values and made them aware of the importance of maintaining social harmony. As a response, people learned to respect environmental balance in order to maintain stability and avoid suffering from unforeseen disasters. In other words, the study outcome indicates the necessity of instilling altruism among students to realise the power of social endeavors, which may bring them financial gains as well as contribute to the reduction of inequalities in society.

It was also reported that TV had a significant influence on NB. This conclusion was in line with earlier studies by Chell et al. (2014). One potential explanation for this result is that students are paying more attention to marginalised people, who are disproportionately affected by society's rising unethical and immoral acts. The younger generation feels that strengthening traditional values is the best way to re-establish decent standards across all socioeconomic strata. Additionally, the recent COVID-19 epidemic has strengthened bonds between families and friends, enabling them to embrace traditional values and help one another during times of crisis. Another possible reason for this outcome is the lack of legislative regulations in Bangladesh to prevent morally repugnant activities that exacerbate social inequities. As a result, the study's findings acknowledged the importance of firmly instilling traditional values in students in order to instil sincerity, honesty, dedication, and respect in them in order to preserve societal relationships and reduce immorality.

Based on the findings of the current study, NB had a significantly positive relationship with AC and PN. The findings were in line with the studies of (Jafarkarimi et al., 2016). The findings indicated that young students hold the opinion that every individual should be mindful to engage in efforts together with governments and other organisations in

order to diminish social disparities and promote economic balance in society. The likely explanations for the result include a lack of large-scale efforts and inefficient government assistance in reducing power distance, dishonest leadership, and insufficient resource allocation. The study's findings emphasise the importance of students adopting broader normative beliefs in order to alleviate their financial security concerns and increase their ability to assist the government in overcoming these obstacles. In addition, the COVID-19 lockdown and economic turmoil have bolstered people's normative beliefs, which have morally prompted them to believe that it is the duty of every individual to support the underprivileged because relying solely on the government and other NGOs could prolong and worsen the situation, especially during times of crisis.

It was found that AC and AR had a major influence on PN. Overall, these results were consistent with Yasir et al. (2021a) and Thelken and Jong (2020) for AC and Silva et al. (2021) and Lukman et al. (2021) for AR. The findings demonstrated that students with an awareness of the negative consequences of social disparities and economic imbalances had a higher likeliness to feel morally obligated and become instinctively accountable to help the underprivileged or make appropriate changes in the socio-environmental circumstances through other community programmes. This result can be explained by the fact that today's students began to notice how socioeconomic disparity is increasing the propensity to engage in criminal activity and other nefarious drugs among underprivileged groups to fulfil their necessities because they are not receiving those fairly. These terrible crimes will eventually infuriate the entire society. As a result, this study emphasised the importance of raising awareness of the consequences and assigning responsibilities among young students in order to increase their personal obligation to engage in social initiatives that reduce injustices and alleviate the suffering of the underprivileged.

Another notable finding from this study was that PN and SN had a significant influence on SEI. Previous research works in the context of SEI (Hockerts, 2017; Rambe & Ndo-firepi, 2021; Yasir et al., 2021a, b; Thelken & Jong, 2020) corroborated the findings. Based on the findings, people who recognise their moral responsibility for the well-being of people who are underprivileged and at the bottom level of society, including those who are exposed to the negative consequences of economic imbalances, are more likely to have a strong desire to establish social enterprises. Concurrently for the significant impact of Social Norm, one explanation is that youngsters are always interested in following recent societal trends and are influenced by famous social workers in their vicinity. Furthermore, during the COVID-19 economic slump, when students witnessed other people working for the well-being of the impoverished and several social movements taking place on social media platforms,

they felt morally obligated to engage in those social activities or to launch their own social initiatives for the improvement of their community.

The multi-group analysis of the students' study discipline revealed no significant differences between applied science students and social science students, indicating that the students' social entrepreneurial intention did not vary by the learning process in order. The factors related to their values, beliefs, and norms showed a practically identical impact on all young students. This condition signified that no specific study curriculum specifically leads to and cultivates any additional attributes among students to strengthen the SEI among the young generation.

Implication

Theoretical implication

This study has contributed to the existing literature on certain complexities of social entrepreneurship, in which mainstream approaches have been left unexplored. From a theoretical standpoint, this study established a broader understanding and importance of the applicability of VBN in the SEI, which may also be expanded to many other sustainable economic and social initiatives. To date, VBN has been mostly applied to determine decision-making and psychological factors in pro-environmental concerns. While several studies in the existing literature focused on personality traits as the determinants of social entrepreneurship (Mair & Noboa, 2006; Hockerts, 2017), few studies were conducted on VBN despite the fact that personal values, beliefs, and norms-related variables have become increasingly relevant in the global sustainable approach. This study has also contributed to the knowledge of social entrepreneurship by introducing a holistic model that elaborated on social inequalities and other issues concerning underprivileged people, which demands more attention in terms of people's pro-environmental values, beliefs, and norms. The research framework integrated two groups of factors in a chain of associations that interact to generate SEI: (a) subjective factors (e.g., TV, NB, SN) and (b) personal action factors (e.g., AV, TV, AC, AR, PN). Furthermore, the study presented an exceptional addendum to the professional level of social entrepreneurship by merging these two groups of factors to examine people's intentions toward social entrepreneurship in the setting of any challenging catastrophic phenomena. The empirical results of the study illustrated the VBN resilience in assisting in the construction and explanation of a distinct and innovative SEI framework for actual social entrepreneurial endeavours. Placing the moral and consequential awareness with implied responsibilities in priority, the current research revealed that VBN theory effectively

accounted for 44.7% of the variation among the elements that identified the more significant theoretical clarity of SEI. The current research also revealed the influence of demographic aspects in the integrated SE model, which may help build targeted social entrepreneurial efforts for impoverished individuals to alleviate poverty and instil a strong vision of ultimate social benefits.

Practical and managerial implications

This study emphasised the importance of embedding personal and social values into the realm of socio-economic sustainability and developing a positive mindset toward social entrepreneurship to generate the intentions of developing social welfare and establishing social justice among young entrepreneurs in developing countries. Notably, the current study findings are practically noteworthy as they lead to the necessity of pursuing social entrepreneurship in this territory for diminishing social inequalities and confirming sustainable solutions to the society most pressing challenges, which the governments alone are not able to rectify (Sengupta & Sahay, 2017). Given the high scores of the components and the fact that young people of Bangladesh valued all the constructs reported in this study, it was inferred that this segment of the population has a strong proclivity towards social entrepreneurship. The interplay among all stakeholders would benefit from the cultivation of individual-level competencies in potential social entrepreneurs and diminish unemployment issues. In this study, both Altruistic and Traditional values could assist aspiring entrepreneurs in increasing their engagement in solving social issues and deploying long-term programmes. These signify that cultivating proper humanitarian and ethical values may result in the reduction of personal-level immorality and unfair activities that may strengthen social entrepreneurial intention. Policymakers may utilise the findings to design strategies to facilitate socio-economic development in their communities by encouraging social entrepreneurship. Following that, numerous strategic plans can be developed to strengthen altruistic and traditional values, such as showcasing documentaries about social disparities and sufferings of the lower-income people, organising volunteer events for medical service, charity services, and a locality cleanliness programme to emphasise the importance of preserving environmental resources. Overall, these factors may aid in the development of a sense of attachment with people and the entire ecosystem, which could spark intuitive values for pursuing social ventures. The results of this study encourage an emphasis on leveraging the cultural and traditional beliefs and reshaping influences on normative beliefs. The study findings would also assist existing active social players in gaining an empirical grasp of the determinants to ensure that they could undertake the initiatives to encourage and involve

the appropriate segment of people in suitable manners for embracing social entrepreneurship. Multiple involvements at educational institutions are required to promote the efficacy of these initiatives, considering that the students have the potential to influence other family members for engaging in social transformations by converting their conservative traditional values into open-mindedness. Following the result of this study that the awareness of consequences strongly influenced personal norms and ascriptions of responsibility, community governance and other non-profit social enterprises may implement specific educational and participatory programmes to describe the negative consequences of social disparities and their potential to eventually cause suffering to all citizens. This condition would instil responsibilities among individuals about the morality that must be adhered to. In order to boost social entrepreneurial activities, the government should make social entrepreneurial courses mandatory subjects at higher education levels to create awareness among students of their social responsibilities and reduce the perceived inactivity, lethargy, and avoidance of those responsibilities. This study identified significant impacts of personal norms and social norms on SEI, implying that establishing a harmony between the individual level of obligatory sense and external stimuli is highly essential. These findings recommended that SEI formation should show better progress when people recognise their moral obligations towards society and observe that other people around them have fulfilled those responsibilities. It was also asserted from the results that prominent and well-known social leaders should regularly visit educational institutions and deliver motivational speeches showcasing their success to encourage young students to pursue careers as social entrepreneurs. Active social workers should logically explain how social endeavours may generate financial profits to ensure that young people can develop new innovative strategies in this field to generate long-term revenue. To set a strong example for the young generation, non-profit organisations should publish their profit statements and organisational sustainability reports. Finally, it is suggested that governments should provide adequate financial funding for young social entrepreneurs to build their sense of responsibility in their use of the country assets for societal wellbeing and socioeconomic sustainability.

Conclusion

This research has described several factors that are vital for developing social entrepreneurial intention with the goal of generating social benefits. In general, a range of values, beliefs, and norms-related aspects are present, which also vary based on the societal challenges and should be the sole aim of pursuing social entrepreneurship to secure

socio-economic advancement. Thoroughly implementing the VBN theory, the results demonstrated that altruistic values and traditional values considerably influence normative beliefs, which subsequently have a strong impact on the awareness of consequences and personal norms. Moreover, the awareness of consequences positively affected personal norms and ascription of responsibility. Following that, both personal norms and social norms were found to have a substantial effect on social entrepreneurial intention among university students in Bangladesh. The study outlined a unique combination of individual and environmental level constructs to investigate the ethical and humanitarian qualities of young generation, which holds the highest potential as future social leaders. This research will assist academics, regulators, and other stakeholders in developing academic programmes that will promote the propagation of social entrepreneurs. It will also contribute to academic and practical knowledge on socio-personal strategies, which could facilitate general public intentions toward social entrepreneurship in developing countries. It is noteworthy that the practical contributions of this study may be applied by NGOs and governments in emerging economies to strengthen their roles and promote social entrepreneurship initiatives. Individual social entrepreneurs will also be able to utilise the findings of this study to better comprehend many aspects that might contribute to their success in their social endeavours. The goal of this research is to encourage more investigations into the developing phenomena of social entrepreneurship, which the researchers believe has the potential to make a significant difference in the next generation's human psychology to achieve social well-being.

A few matters are considered the limitations of this study. To be specific, the effects of financial and resource constraints on pursuing social entrepreneurship were not taken into account. Although leadership-bridging skills are highly necessary for any social endeavour, the leadership traits were not included in this study. Nevertheless, these limitations have opened the door to integrating further personal, environmental, and contextual elements that may have a major impact on SEI with easy access to financial, technological, and political assistance. Moreover, the cross-sectional approach and a single population segment placed a limitation on the study generalisability, which has necessitated further rigorous longitudinal investigation with a larger population and diverse segment. Finally, comparison investigations with different cultures and countries may also help widen the scope of refining and reconstructing policies, support systems, and educational strategies in any specific segment.

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Authors' contributions Farzana Naznen and Muhammad Khalilur Rahman contributed to the research design, questionnaire design and

writing – original draft. Abdullah Al Mamun contributed to the conception, research design, analyse and interpretation of data, and writing – revise and revision.

Data availability All data generated or analysed during this study are included in this published article (Submitted with the Manuscript: additional supporting file).

Declarations

Ethics approval and consent to participate The local ethics committee (Universiti Kebangsaan Malaysia) ruled that no formal ethics approval was required in this particular case because this research because (a) the data is completely anonymous with no personal information being collected; (b) the data is not considered to be sensitive or confidential in nature; (c) the issues being researched are not likely to upset or disturb participants; (d) vulnerable or dependant groups are not included; and (e) there is no risk of possible disclosures or reporting obligations. This study has been performed in accordance with the Declaration of Helsinki. Written informed consent for participation was obtained from respondents who participated in the survey. For the respondents who participated in the survey were asked to read the ethical statement posted at the top of the form (*There is no compensation for responding, nor is there any known risk. In order to ensure that all information will remain confidential, please do not include your name. Participation is strictly voluntary and you may refuse to participate at any time*) and proceed only if they agree. No data was collected from anyone under 18 years old.

Consent to publish Not applicable.

Competing interests The author(s) declare(s) that they have no competing interests.

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