

## Article

# Progressing Sustainable Development through Social Entrepreneurship: Modelling Intentional Predictors for Bangladesh Using the Value–Belief–Norm Model

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**Abstract:** Considering the diverse social and environmental issues globally, social entrepreneurship could be the most relevant solution to address social issues by employing a sustainable economic model, particularly for developing nations with limited government support. Hence, we examined social entrepreneurship intention among working adults in Bangladesh using an extended version of the value–belief–norm model. We used a cross-sectional design to arrange an online questionnaire and collect quantitative data from 187 respondents. SEM-PLS was used for analysis. Findings revealed a significant positive effect of openness to change, self-enhancement, and self-transcendence on problem awareness. Problem awareness was found to significantly affect outcome efficacy and social entrepreneurship intention. Finally, personal norms showed significant positive effects on social entrepreneurship intention. The mediating role of problem awareness and personal norms was further confirmed. Apart from extending the lens of VBN and enriching the current literature, insights from this study could assist policymakers, social organizations, and social entrepreneurs in formulating relevant policies and sustaining social ventures.

**Keywords:** social entrepreneurship intention; value–belief–norm model; working adults; Bangladesh



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**Citation:** Fazal, S.A.; Mamun, A.A.; Hayat, N.; Peris, S.F.; Ali, M.H.; Jamaluddin, H. Progressing Sustainable Development through Social Entrepreneurship: Modelling Intentional Predictors for Bangladesh Using the Value–Belief–Norm Model. *Sustainability* **2023**, *15*, 12971. <https://doi.org/10.3390/su151712971>

Academic Editor: Ken Peattie

Received: 7 June 2023

Revised: 11 August 2023

Accepted: 21 August 2023

Published: 28 August 2023



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## 1. Introduction

Social entrepreneurship, characterized by non-commercial and commercial activities with the potential to develop business prospects related to social welfare, emerged as an optimum solution for ecological imbalance, social disparities, and unemployment [1]. Social entrepreneurship catalyses development and change, creates social value, and hence represents a rapidly extending field of policy development, practice, and academic research [2]. As one of the most viable approaches to effectively address diverse environmental and social issues, social entrepreneurship is a countermeasure against discrimination while promoting economic growth [1]. According to Tiwari et al. (2017) [3], social entrepreneurship is considered a promising avenue to address ‘social exclusion’ and resolve cultural, social, and environmental problems by forwarding innovative and sustainable solutions through social entrepreneurs, who are consistently bringing profound social change and generating economic value to ensure financial viability across developed and developing

nations. Social entrepreneurship is most relevant for developing nations, as such ventures allocate most of their resources to address social issues by employing a sustainable economic model [1].

In Bangladesh, social and economic issues, such as income inequality, poverty, health, lack of access to formal education, and unemployment, triggered several social impact-oriented business initiations [4]. Undoubtedly, exploring the intention towards social entrepreneurship of the masses in society is significant for a comprehensive and effective understanding of public perceptions, which in turn could address social issues, including government and market failure, as well as excessive market competition [2]. Additionally, such research exploring social entrepreneurship intentions could be valuable, as several researchers argued that social entrepreneurship is majorly activated by intentions and influenced by combinations of cognitions and motives [5].

Particularly in the context of social entrepreneurship, intention reflects an essential prerequisite for social entrepreneurial activity [6]. However, knowledge regarding social entrepreneurship intention formation mechanisms is limited [7]. Moreover, factors influencing social entrepreneurial intentions for developing nations remain under researched [1,8]. The lack of research on social businesses in Bangladesh makes it difficult for potential and existing entrepreneurs, investors, experts, as well as policymakers to develop appropriate strategies for sustaining and expanding social businesses in the country [4]. Furthermore, few studies used the VBN lens to examine social entrepreneurship intention, reflecting a major research gap. Finally, most earlier studies focused only on the big five personalities, attitudinal characteristics, and emotions as antecedents of social entrepreneurship intention. Therefore, to extend the existing literature, this study employed the lens of VBN theory to identify the significant determinants of social entrepreneurship intention using a sample of working adults from Bangladesh. Results revealed that values, such as openness to change, self-enhancement, and self-transcendence, are significant predictors of problem awareness. Problem awareness beliefs, consequently, were found to positively influence outcome efficacy and social entrepreneurship intention. Finally, personal norms have been identified to have significant positive effects on social entrepreneurship intention. This study enriched the literature on social entrepreneurship intention formation, particularly from developing nations' perspectives. Moreover, this paper extended the lens of the VBN model. Policy implications and recommendations to support social ventures' expansion have also been forwarded.

## 2. Literature Review

### 2.1. Social Entrepreneurship and Sustainability

Research linking social entrepreneurship and sustainability is rapidly gaining interest due to the importance of connecting the two constructs [9]. In their review of social entrepreneurship, Kamaludin et al. (2023) [9] identified social, economic, governance, and behaviour as four crucial dimensions of social entrepreneurship that could affect sustainability. Based on this, we argue that social entrepreneurship is important for sustainability and achieving sustainable development goals by 2030, wherein intention towards social entrepreneurship is the strongest determinant of the behavioural dimension of social entrepreneurship. According to Kamaludin et al. (2023) [9], there exists an urgent need to understand the underlying factors that motivate social entrepreneurs, which in turn could facilitate acquiring sustainability. Earlier, Goyal et al. (2015) [10] argued that social entrepreneurship emerged as a viable alternative to attend to the needs of low-income communities, particularly in developing nations, thus making a sustainable impact. In a separate study, Zhang and Swanson (2014) [11] noted that the social entrepreneurship philosophy moves beyond economic, social, and environmental efficiency toward effectiveness, thereby contributing significantly to sustainability. More recently, Diaz-Sarachaga and Ariza-Montes (2022) [12] added that social entrepreneurship, as a tool to create value in environmental and social terms beyond mere profit maximization, addresses certain key

issues of sustainable development and SGD, such as poverty eradication, unemployment, gender inequalities, environmental protection, and social inclusion.

## 2.2. Context of Study

Bangladesh is home to BRAC, one of the largest and oldest social enterprises in the world, working towards empowering women, reducing poverty, extending education to the underprivileged, and establishing social equality, as well as Grameen Bank, introducing microfinance to the world for assisting un-bankable poor villagers to raise capital [1,8]. According to Krlev (2012) [13], Bangladesh, known as the ‘mother of Social Business’, is significantly dependent on civil society and private sector engagements to address social issues and is therefore regarded as exemplary for social entrepreneurship in developing countries, witnessing considerable interest from scholarly research. Despite the importance of social entrepreneurship for economic growth and the fact that Bangladesh reflected a pioneering nation in social entrepreneurship [14], there is very limited related literature on social entrepreneurship intention in the context of this aspiring nation [1,14,15]. Moreover, in Bangladesh, social entrepreneurship is still growing at a slow rate compared to the country’s population and social issues, such as low employment rates and unequal distribution of wealth [7,8]. Hence, based on the above, we found Bangladesh to be a suitable laboratory for studying social entrepreneurship intention.

## 2.3. Theoretical Foundation

Figure 1 illustrates the theory of value–belief–norm encompassing internal factors and advocates that values influence attitudes, awareness of consequences, and assumption of responsibility that contribute towards pro-environmental behaviour [16,17]. Awareness of needs or problem awareness reflects the extent to which an individual is aware of the adverse consequences of not acting pro-socially for others or for other things one values [18]. Assumption of responsibility translates to feelings of responsibility for the negative consequences of not acting pro-socially. Finally, outcome efficacy could be identified as actions to relieve the needs of others or things one values [18]. VBN suggests that personal norms and pro-social attitudes are essential determinants of environment-friendly behaviour, wherein the effect of values is mediated by beliefs and subjective norms [17,19]. Deducing from the aforesaid, we expect that individuals deciding to take pro-environmental actions should have some moral or altruistic motivation. According to Maisaroh et al. (2022) [19], VBN starts with values that develop into beliefs that develop intentional models, which later build behaviour.

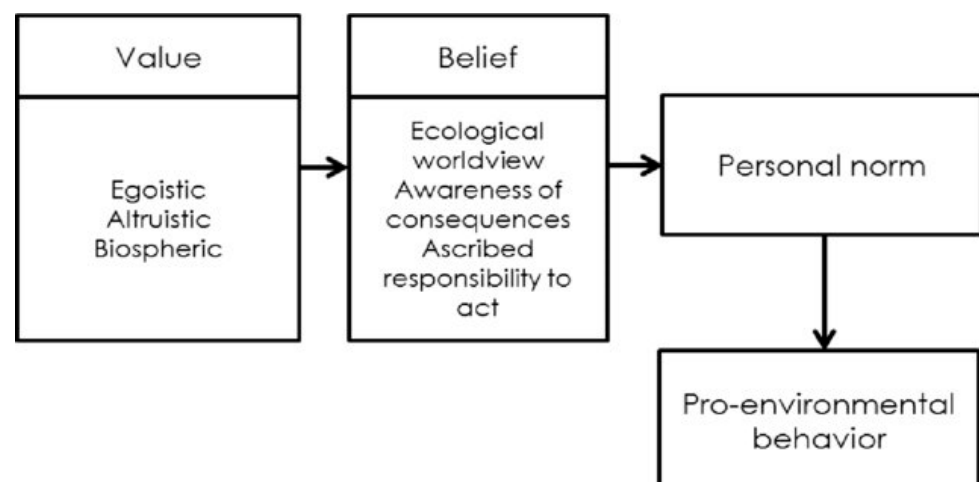


Figure 1. VBN theory of pro-environmental behaviour model. Source: Stern et al. (2000) [17].

VBN is a suitable theoretical avenue for the present study, as it is perceived to be a comprehensive model integrating diverse individual factors to establish that pro-environmental

behaviours, such as social entrepreneurship, are more likely to occur when a causal series of variables (e.g., values, beliefs, personal norms) is present [20]. Moreover, VBN is relevant as, in line with Steg and Groot (2010) [18], we argue that problem awareness, responsibility, and outcome efficacy play important roles in the development of personal norms and various types of pro-social intentions in the social as well as environmental domain, including the present case of social entrepreneurship. However, in a recent study, Naznen et al. (2022) [1] argued that the VBN is yet to be fully adopted to investigate social entrepreneurship empirically. Therefore, based on the above, to extend the lens of VBN in a social entrepreneurial context, we integrate descriptive and injunctive social norms into the VBN model to develop relevant personal norms that could build social entrepreneurship intentions. We further assume openness to experience, self-enhancement, and self-transcendence to be values that initiate problem awareness and outcome efficacy (as a belief), developing social entrepreneurship intention among individuals.

#### *2.4. Openness to Experience and Problem Awareness*

Openness to experience could include open-mindedness, creative behaviour, and a willingness to try new things or take risks based on the motivation of independent thoughts and actions [2]. On the other hand, problem awareness reflects the extent to which people are aware of the adverse consequences of not acting pro-socially, which motivates them to adopt new social behaviours and actions [2]. According to Suchy et al. (2011) [21], problems and actual difficulties are associated with lower agreeableness, higher neuroticism, and openness to experience. It is perceived that openness to experience is reflected in individuals through their interest in generating original ideas and engaging in intellectual debates without adhering to traditional values that discourage any kind of query [22]. Such individuals are more likely to contribute to their community and engage in pro-environmental projects, such as social entrepreneurship, more positively. The stimulation and self-direction that constitute openness to experience involve intrinsic motivation for personal beliefs and behaviours. In the recent literature, Ibaceta and Madrid (2021) [23] reported that openness to experience could cause self-perception of mind-wandering among individuals through meta-awareness processes. In a separate study, Oz (2016) [24] revealed that openness to experience and extraversion are central to metacognitive awareness. It is thus perceived that open individuals tend to be more aware [25]. Hence, based on the above, we propose the following hypothesis:

**Hypothesis 1:** *Openness to experience is positively and significantly related to problem awareness.*

#### *2.5. Self-Enhancement and Problem Awareness*

Self-enhancement reflects one of the egoistic values, wherein the motivational goal of power focuses on gaining dominance over resources and individuals. In contrast, the goal of achievement works on achieving personal success through personal competence or external abilities [2]. According to Minelgaitè and Liobikienè (2021) [16], self-enhancement encompasses egoistic values that seek self-benefits and concerned self-interest. Logically, such values could influence others' attitudes, intentions, and behaviours in diverse ways. Nordlund and Garvill (2002) [26] found a negative association between self-enhancement and problem awareness. However, based on Sedikides (2021) [27], we argue that a major portion of the self-enhancement literature relates to the awareness of developing and using protective mechanisms and their influence on such mechanisms or their success. Hence, we proposed the following hypothesis:

**Hypothesis 2:** *Self-enhancement is positively and significantly related to problem awareness.*

#### *2.6. Self-Transcendence and Problem Awareness*

Self-transcendence is a socio-altruistic value orientation that encompasses benevolence and universalism, wherein universalism's motivational goal is to enhance all people's

welfare [2]. According to Minelgaitė and Liobikienė (2021) [16], the self-transcendence value is associated with collective interest concerning the empathy of individuals for others' welfare. Hansla (2011) [28] argued that self-transcendence value orientation influences individuals to feel strongly about environmental problems. Earlier, Coward and Reed (1996) [29] postulated self-transcendence as a resource for healing that reaches beyond self-boundaries and is derived from an intensified awareness of one's being. It is perceived that higher self-transcendence could lead to a greater sense of well-being through awareness and integration of one's whole being in a difficult situation [30]. Evidence suggests a positive relationship between universalism with pro-environmental attitudes and behaviours, implying the influence of self-transcendence on one's attitudes, intentions, and behaviours. According to Nordlund and Garvill (2002) [26], self-transcendence positively correlates to problem awareness and personal norms. In a separate study, Vago and Silbersweig (2012) [31] narrated that ethical conduct is a quality embedded in self-transcendence that brings awareness to oneself and the people around them. Hence, we proposed the following hypothesis:

**Hypothesis 3:** *Self-transcendence is positively and significantly related to problem awareness.*

#### 2.7. Problem Awareness and Outcome Efficacy

Problem awareness reflects the extent to which people are aware of the adverse consequences of not acting pro-socially, which motivates them to adopt new social behaviours and actions [2]. On the other hand, outcome efficacy could be conceptualised as identifying specific actions to alleviate our values and problems [3]. According to Chen et al. (2022) [32], outcome efficacy accounts for the effects of descriptive misperception on pro-environmental behaviour, while problem awareness correlates to the effects of injunctive misperception on pro-environmental behaviour. Hence, we argue that outcome efficacy reflects the extent of individual control over their problems. According to Lane et al. (2001) [33], the limited efficacy of interventions could cause positive collateral effects on problem behaviour. Steg and Groot (2010) [18] empirically found that problem awareness influenced outcome efficiency. Moreover, Yang et al. (2023) [2] exhibited a significant and positive influence of problem awareness on outcome efficacy. In a separate study, Rahimi and Abedi (2014) [34] revealed a positive and significant correlation between self-efficacy, metacognitive awareness, planning evaluation, and problem-solving strategies. Therefore, based on the above, we hypothesize the following:

**Hypothesis 4:** *Problem awareness is positively and significantly related to outcome efficacy.*

#### 2.8. Descriptive Social Norms and Personal Norms

Generally, social norms denote individuals' interpretations of recommendations and points of view regarding a particular behaviour from significant others around them. More specifically, descriptive social norms reflect the most expected action based on the perceptions of others [35]. In the present context, social norms (descriptive or injunctive) suggest that social entrepreneurs have a moral responsibility to assist their surrounding communities. Personal norms refer to one's sense of self-moral obligation to perform pro-social actions, reflecting self-expectation and a sense of responsibility to perform specific actions [2]. Empirically, Kim and Seock (2019) [36] found that social norms influence personal norms. We argue that, to be potent, descriptive norms must be internalised as personal norms, influencing subsequent behavioural intention [37]. According to Bertoldo and Castro (2016) [38], descriptive norms predict personal norms directly. In a later study, Han et al. (2018) [39] found that descriptive social norms significantly activated personal norms. Hence, based on the above, we propose the following hypothesis:

**Hypothesis 5:** *Descriptive social norms are positively and significantly related to personal norms.*

### 2.9. Injunctive Social Norms and Personal Norms

Injunctive social norms indicate perceptions about normatively appropriate behaviour, approved or disapproved by the community in a specific context, which motivates actions through the anticipation of social rewards or punishment [2]. According to Doran and Larsen (2016) [35], injunctive norms reflect beliefs about how an individual ought to act based on others' moral expectations of appropriate or inappropriate approval or disapproval and thus motivate behaviour through social expectations. Personal norms emerge from deliberately adhering to normative beliefs to comprehend societal inequalities. Hence, we argue that to be potent, injunctive norms must be internalised as personal norms, which trigger subsequent behavioural intention [20]. Empirically, Yang et al. (2023) [2] found injunctive social norms to exhibit significant and positive personal norms. Earlier, Bertoldo and Castro (2016) [38] found that injunctive norms predict personal norms better when participants identify with a group. In a more recent study, D'Arco et al. (2023) [40] found that injunctive social norms indirectly influence the intention to choose sustainable transportation and eco-friendly hotels through personal norms. Moreover, Han et al. (2018) [39] confirmed that injunctive social norms significantly activated personal norms. Therefore, based on the above, we propose the following hypothesis:

**Hypothesis 6:** *Injunctive social norms are positively and significantly related to personal norms.*

### 2.10. Outcome Efficacy and Social Entrepreneurship Intention

Social entrepreneurial intentions could be translated as the psychological behaviour of individuals that persuades them to capture knowledge, follow ideas and execute social business plans to become social entrepreneurs [3]. Urban (2020) [5] found that efficacy represents a crucial motivational construct to influence individual goals, choices, efforts, emotional reactions, coping, and persistence and mediates the effect of entrepreneurial alertness on social entrepreneurial intentions. Empirically, self-efficacy is positively associated with attitude and social entrepreneurial intention [3]. In a related study, Younis et al. (2021) [41] showed that social entrepreneurial self-efficacy positively influences social entrepreneurial intention, wherein high perceived social support strengthens the relationship between social entrepreneurial self-efficacy and social entrepreneurial intention. Furthermore, Ip et al. (2022) [42] stressed that outcome expectations coupled with perceived social support and social entrepreneurial self-efficacy positively influenced social entrepreneurial behaviour. Interestingly, Luc (2020) [43] argued that outcome efficacy represents a flexible factor, wherein individuals' outcome expectations could transform into motivation when backed by favourable conditions. However, in a separate study, Ip et al. (2021) [44] suggested that efficacy coupled with outcome expectations is a crucial mediator for social entrepreneurship intention. Hence, based on the above, we propose the following hypothesis:

**Hypothesis 7:** *Outcome efficacy is positively and significantly related to social entrepreneurship intention.*

### 2.11. Personal Norms and Social Entrepreneurship Intention

The personal norm is reflected through an individual's realisation that their activities may have negative or positive consequences for others, to which they are willing to respond accordingly based on their values and norms. Personal norms emerge from deliberately adhering to normative beliefs to comprehend societal inequalities [1]. In general, we perceive that personal interest in relevant activities represents the primary motivation of individuals to become entrepreneurs [45]. According to Kruse et al. (2019) [3], personal value positively affects social entrepreneurship intention. Empirically Naznen et al. (2022) [1] found a significant influence of personal norms on social entrepreneurial intention. Moreover, Yang et al. (2023) [2] showed personal norms' statistically significant and positive influence on social entrepreneurial intention. Additionally, Zainol et al. (2023) [46] mentioned a significant effect of personal norms on social entrepreneurial intentions in their

study. Furthermore, Ahuja et al. (2019) [45] stressed using personal norms to predict moral intentions, such as social entrepreneurship. Hence, based on the above, we hypothesize the following:

**Hypothesis 8:** *Personal norms are positively and significantly related to social entrepreneurship intention.*

#### 2.12. The Mediating Role of Problem Awareness, Outcome Efficacy, and Personal Norms

Logically, individuals deciding to take pro-environmental actions should have some moral or altruistic motivation. Theoretically, the VBN theory suggests that values develop into beliefs, developing intentional models, leading to actual behaviour [17,19]. Empirically, Kruse et al. (2019) [6] found the indirect effect of openness to experience, self-enhancement, and self-transcendence on social entrepreneurship intention, which indicates the presence of mediating variables in the model. Earlier studies reported that the attitude mediated the effect of self-enhancement, self-transcendence, openness to change, and conservation on both social and commercial entrepreneurial intent [45]. According to Wang and Zhang (2020) [47], personal norms mediate the relationship between social norms and pro-environmental behaviours. Specifically, Kim and Seock (2019) [36] showed that personal norms significantly mediate the relationship between social norms and eco-friendly apparel purchasing behaviour. Additionally, Bamberg et al. (2007) [37] mentioned that descriptive social norms could influence behavioural intentions indirectly through personal norms. In a more recent study, D'Arco et al. (2023) [40] confirmed that injunctive social norms indirectly influence the intention to choose sustainable transportation and eco-friendly hotels through personal norms. Previously, Han et al. (2018) [39] also endorsed that personal norms were a mediator for the impact of injunctive and descriptive social norms on pro-environmental intentions. Hence, based on the above, we propose the following hypotheses:

**Hypothesis HM<sub>1</sub>:** *The relationship between openness to experience and outcome efficacy is significantly mediated by problem awareness.*

**Hypothesis HM<sub>2</sub>:** *The relationship between self-enhancement and outcome efficacy is significantly mediated by problem awareness.*

**Hypothesis HM<sub>3</sub>:** *The relationship between self-transcendence and outcome efficacy is significantly mediated by problem awareness.*

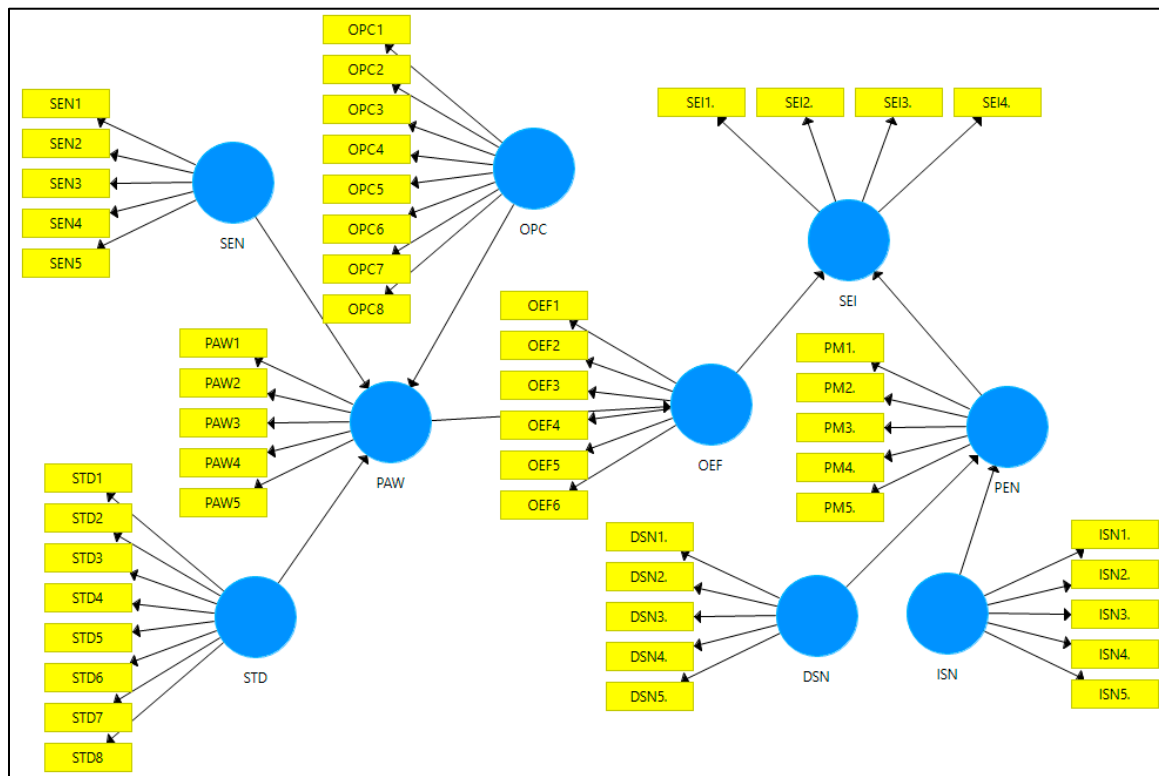
**Hypothesis HM<sub>4</sub>:** *The relationship between problem awareness and social entrepreneurial intention is significantly mediated by outcome efficacy.*

**Hypothesis HM<sub>5</sub>:** *The relationship between descriptive social norms and social entrepreneurial intention is significantly mediated by personal norms.*

**Hypothesis HM<sub>6</sub>:** *The relationship between injunctive social norms and social entrepreneurial intention is significantly mediated by personal norms.*

### 3. Methodology

Figure 2 illustrates the research model. The current study used a cross-sectional design to arrange an online questionnaire to collect quantitative data from working adults in Bangladesh. We used the non-probability-based snowball sampling technique. No specific employment requirements were set in terms of job type, years of experience, or gender for selecting respondents. The only condition was that the respondents must be 18 years and above (age) and full-time employees.



**Figure 2.** Research model.

### 3.1. Sample Size

The sample size for the current work was calculated with G-Power version 3.1. Based on the power of 0.95 with an effect size of 0.15, a sample size of one hundred and fifty-three was required to test the research model with eight predictors [48]. However, we collected quantitative data from two hundred working adults. After data cleaning, the final analysis was performed with the one hundred and fifty-eight responses collected from Bangladesh.

### 3.2. Research Questionnaire

The research questionnaire used concise, simple, and unbiased wording. We used subjective measures, and items were derived from existing studies. Self-Enhancement was adopted from Lindeman and Verkasalo (2005) [49]; Openness to Change was also adapted from Lindeman and Verkasalo (2005) [49]; Self-Transcendence was further adapted from Lindeman and Verkasalo (2005) [49]; Problem Awareness and Outcome Efficacy were adapted from Ünal et al. (2018) [50]; Descriptive Social Norms and Injunctive Social Norms was adapted from Doran and Larsen (2016) [35]; Personal Norms was adapted from Ünal et al. (2018) [50]; and Social Entrepreneurial Intention was adapted from Ruiz-Rosa et al. (2020) [51]. Survey instruments were measured using a 5-point Likert scale. All items used to measure the variables have been noted in Appendix A.

### 3.3. Common Method Variance (CMV)

The current study assumed Harman's (1976) one-factor test as a statistical tool to assess the issue of CMV [52]. One factor extracted from all principal constructs is expected to explain less than 50% of the variance [52]. The results show that one factor explained 37.40% of the variance, less than the maximum threshold of 50% [52]. Furthermore, correlation among constructs that exceed 0.9 is considered an indicator of common method bias [53]. For the current study, the highest correlation between the constructs was 0.828 (between openness to change and self-transcendence), thus signifying no grave issue of CMB in the dataset.



### 3.4. Multivariate Normality

SEM-PLS is not associated with multivariate normality in the data as it is a non-parametric analysis instrument [54]. Following the recommendation of Cain et al. (2017) [55], multivariate data normality were tested using an online tool of WebPower (<https://webpower.psychstat.org/wiki/tools/index> (accessed on 27 April 2023)) to confirm data normality. The test outcomes approve that the data set is not as normal as Mardia's multivariate coefficient  $p$ -values of less than 0.05 [55].

### 3.5. Data Analysis Method

Partial least squares structural equation modeling (PLS-SEM) was used with the Smart-PLS software 3.1 for data analysis. PLS-SEM is a multivariate analysis instrument to gauge the path models with composites' latent constructs [54]. PLS-SEM empowers the researcher to tackle non-normal and small data sets. Furthermore, PLS-SEM has a casual-predictive nature with an undisturbed supposition of goodness-of-fit estimation than the covariance-based SEM [56]. Two-step techniques analyzed data with PLS-SEM, and the first measurement was performed to test the model's reliability and validity at the constructs' level [54]. The second stage was performed to estimate the structural model and investigate study hypotheses with significance levels [57]. Model estimation was performed with  $r^2$ ,  $Q^2$ , and the effect size  $f^2$  describing the path effect from the exogenous construct for the endogenous construct [54].

## 4. Results

### 4.1. Demographic Profile

Table 1 presents the respondents' characteristics; 79.7% of the respondents were male. The respondents' age ranges were 21–30 years (52.4%), 31–40 years (35.3%), 41–50 years (6.4), 51–60 years (3.7%), and 2.2% of the respondents were above 60 years of age. For the respondents' education, 50.9% of the respondents had a bachelor's degree, 44.3% of the respondents attained a master's degree, and the remaining achieved a doctorate-level degree. A total of 52.9% of the people are married. Among the respondents, 79.1% were working in the services sector, and the remaining worked in the manufacturing sector. Most of the respondents lived in Chittagong (76.5%), Dhaka (16.7%), Barishal (3.7%), Rangpur (1.1%), Khulna (0.5%), Mymensingh (0.5%), Rajshahi (0.5%), and Sylhet (0.5). The results are provided in Table 1.

**Table 1.** Profile of the respondents.

	N	%		n	%
<i>Gender</i>			<i>Employment Sector</i>		
Male	149	79.7	Manufacturing	39	20.9
Female	38	20.3	Services	148	79.1
Total	187	100.0	Total	187	100
<i>Age</i>			<i>Respondents' Position</i>		
Between 21–30 years old	98	52.4	Entry Level	85	45.5
Between 31–40 years old	66	35.3	Mid Level	89	47.6
Between 41–50 years old	12	6.4	Top Level	13	6.9
Between 51–60 years old	7	3.7	Total	187	100
61 years old and above	4	2.2	<i>Respondents' Location</i>		
Total	187	100.0	Barishal	7	3.7
<i>Education</i>			Chittagong	143	76.5
School level education	0	0	Dhaka	31	16.7
Bachelor degree	95	50.9	Khulna	1	0.5
Master degree	83	44.3	Mymensingh	1	0.5
Doctorate degree	9	4.8	Rajshahi	1	0.5
Total	187	100.0	Rangpur	2	1.1
<i>Marital Status</i>			Sylhet	1	0.5
Married	99	52.9	Total	187	100
Single	88	47.1			
Total	187	100.0			

Note. Authors' own compilation.

#### 4.2. Measurement Model Assessment

At the first stage of PLS-SEM analysis, the reliability and validity scores for the latent construct were evaluated with the Cronbach Alpha (CA), Dillon–Goldstein rho (DG rho), and Composite Reliability (CR) and reported in Table 2. Consequently, CA values are good, above 0.70 standards [56], and the minimum CA value was self-enhancement = 0.794. The DG rho must be above 0.70 to represent satisfactory reliability [54]. The self-enhancement attained the lowest score (0.799). The CR, too, needs to be more than 0.70 [56]; the least score (0.842) is achieved by the injunctive social norms construct. The convergent validity was accomplished with the average variance extracted (AVE) value. AVE scores must be above 0.500; all the AVE scores for latent constructs were above the 0.500 threshold [54]. Finally, the multicollinearity of the constructs was appraised with the variance inflation factors (VIF). The VIF value of each variable is less than 3.3, suggesting that no significant collinearity issue exists in the existing dataset [56]. The outcomes are provided in Table 2.

**Table 2.** Measurement model assessment.

Variables	Items	CA	DG rho	CR	AVE	VIF
Self-Enhancement	5	0.794	0.799	0.858	0.548	1.765
Openness to Change	8	0.910	0.916	0.928	0.625	3.242
Self-Transcendence	8	0.915	0.917	0.931	0.629	3.036
Problem Awareness	5	0.859	0.875	0.898	0.639	1.000
Outcome Efficacy	6	0.839	0.842	0.882	0.555	1.351
Descriptive Social Norms	5	0.854	0.894	0.893	0.625	2.078
Injunctive Social Norms	5	0.794	0.831	0.842	0.518	2.078
Personal Norms	5	0.888	0.896	0.918	0.693	1.351
Social Entrepreneurship Intention	4	0.830	0.885	0.886	0.665	-

Note. Standard Deviation (SD); Cronbach's Alpha (CA); Dillon–Goldstein's rho (DG rho); Composite Reliability (CR); Average Variance Extracted (AVE); Variance Inflation Factors (VIF). Source: Author(s) own compilation.

The current work employed the Fornell–Larcker criterion [57], Hetro-trait Mono-trait (HTMT) ratio, and loading cross-loading analysis to evaluate the model's discriminant validity [54]. The Fornell–Larcker criterion was assessed by using the square root of a score of AVE of the specific construct; the square root of AVE needs to be more than the corresponding correlation coefficient to establish the discriminant validity [54]. The current model shows the appropriate discriminant validity, as portrayed in Table 3. The model HTMT ratio was then applied to appraise the discriminant validity [58]. All the HTMT ratios were under the 0.900 limits and depicted the appropriate discriminant validity [54]. Finally, the comparison between the loading and cross-loading of each construct was utilized to gauge the current model's discriminant validity. Largely, items load the specific latent variable to which it belongs [54], whereas cross-loading is the influence of items on other latent variables. The results are offered in Tables 3 and 4.

**Table 3.** Loadings and cross-loadings.

Item Code	OPC	SEN	STD	PAW	OEF	DSN	ISN	PEN	SEI
OPC—Item 1	0.734	0.443	0.581	0.441	0.515	0.352	0.411	0.391	0.417
OPC—Item 2	0.740	0.456	0.612	0.476	0.439	0.407	0.424	0.448	0.366
OPC—Item 3	0.844	0.543	0.727	0.498	0.619	0.431	0.439	0.519	0.375
OPC—Item 4	0.859	0.469	0.688	0.476	0.572	0.334	0.426	0.470	0.315
OPC—Item 5	0.829	0.453	0.693	0.521	0.612	0.286	0.420	0.439	0.313
OPC—Item 6	0.837	0.536	0.743	0.539	0.564	0.354	0.454	0.484	0.375
OPC—Item 7	0.732	0.433	0.522	0.380	0.436	0.330	0.366	0.342	0.278
OPC—Item 8	0.691	0.392	0.602	0.404	0.445	0.292	0.316	0.289	0.219
SEN—Item 1	0.456	0.753	0.524	0.435	0.442	0.415	0.429	0.462	0.416
SEN—Item 2	0.358	0.738	0.366	0.371	0.414	0.377	0.445	0.343	0.327
SEN—Item 3	0.484	0.779	0.566	0.374	0.652	0.276	0.333	0.392	0.244

Table 3. Cont.

Item Code	OPC	SEN	STD	PAW	OEF	DSN	ISN	PEN	SEI
SEN—Item 4	0.444	<i>0.714</i>	0.512	0.314	0.594	0.200	0.253	0.283	0.150
SEN—Item 5	0.462	<i>0.714</i>	0.437	0.355	0.617	0.250	0.315	0.337	0.260
STD—Item 1	0.570	0.571	<i>0.769</i>	0.477	0.510	0.387	0.425	0.443	0.367
STD—Item 2	0.680	0.574	<i>0.802</i>	0.468	0.564	0.414	0.430	0.495	0.405
STD—Item 3	0.579	0.461	<i>0.711</i>	0.541	0.480	0.431	0.451	0.390	0.383
STD—Item 4	0.614	0.499	<i>0.745</i>	0.425	0.504	0.368	0.404	0.375	0.260
STD—Item 5	0.697	0.542	<i>0.834</i>	0.473	0.599	0.387	0.466	0.553	0.486
STD—Item 6	0.722	0.532	<i>0.863</i>	0.511	0.556	0.384	0.432	0.515	0.403
STD—Item 7	0.667	0.462	<i>0.808</i>	0.419	0.550	0.351	0.331	0.390	0.323
STD—Item 8	0.712	0.479	<i>0.800</i>	0.513	0.540	0.394	0.447	0.482	0.407
PAW—Item 1	0.478	0.393	0.513	<i>0.801</i>	0.367	0.418	0.535	0.541	0.447
PAW—Item 2	0.610	0.462	0.565	<i>0.837</i>	0.540	0.411	0.645	0.597	0.466
PAW—Item 3	0.459	0.439	0.497	<i>0.842</i>	0.406	0.522	0.615	0.523	0.438
PAW—Item 4	0.378	0.337	0.370	<i>0.741</i>	0.327	0.361	0.514	0.440	0.332
PAW—Item 5	0.422	0.363	0.453	<i>0.769</i>	0.386	0.411	0.503	0.500	0.499
OEF—Item 1	0.514	0.586	0.546	0.361	<i>0.748</i>	0.268	0.305	0.373	0.323
OEF—Item 2	0.447	0.538	0.461	0.360	<i>0.714</i>	0.299	0.336	0.327	0.348
OEF—Item 3	0.476	0.536	0.447	0.359	<i>0.750</i>	0.262	0.313	0.323	0.241
OEF—Item 4	0.498	0.517	0.457	0.414	<i>0.795</i>	0.265	0.366	0.382	0.285
OEF—Item 5	0.518	0.524	0.548	0.405	<i>0.762</i>	0.212	0.401	0.463	0.370
OEF—Item 6	0.562	0.549	0.575	0.413	<i>0.698</i>	0.325	0.387	0.398	0.193
DSN—Item 1	0.293	0.309	0.312	0.388	0.283	<i>0.695</i>	0.503	0.339	0.378
DSN—Item 2	0.294	0.316	0.343	0.339	0.233	<i>0.811</i>	0.505	0.344	0.323
DSN—Item 3	0.243	0.270	0.328	0.378	0.188	<i>0.863</i>	0.551	0.366	0.338
DSN—Item 4	0.294	0.357	0.358	0.340	0.280	<i>0.814</i>	0.574	0.386	0.371
DSN—Item 5	0.503	0.367	0.510	0.549	0.374	<i>0.761</i>	0.639	0.626	0.495
ISN—Item 1	0.400	0.352	0.446	0.650	0.384	0.522	<i>0.790</i>	0.643	0.522
ISN—Item 2	0.279	0.235	0.275	0.378	0.203	0.629	<i>0.635</i>	0.301	0.320
ISN—Item 3	0.299	0.341	0.290	0.363	0.315	0.606	<i>0.702</i>	0.378	0.375
ISN—Item 4	0.313	0.326	0.328	0.380	0.280	0.564	<i>0.677</i>	0.321	0.342
ISN—Item 5	0.491	0.443	0.492	0.621	0.427	0.447	<i>0.781</i>	0.723	0.543
PEN—Item 1	0.458	0.510	0.472	0.588	0.444	0.496	0.624	<i>0.861</i>	0.611
PEN—Item 2	0.504	0.421	0.519	0.516	0.464	0.416	0.622	<i>0.864</i>	0.694
PEN—Item 3	0.569	0.481	0.581	0.613	0.495	0.500	0.698	<i>0.897</i>	0.695
PEN—Item 4	0.359	0.353	0.389	0.489	0.364	0.489	0.530	<i>0.766</i>	0.518
PEN—Item 5	0.346	0.294	0.419	0.522	0.337	0.437	0.541	<i>0.765</i>	0.619
SEI—Item 1	0.193	0.135	0.176	0.318	0.190	0.392	0.368	0.326	<i>0.599</i>
SEI—Item 2	0.414	0.360	0.432	0.520	0.330	0.386	0.529	0.739	<i>0.884</i>
SEI—Item 3	0.352	0.329	0.443	0.476	0.333	0.491	0.565	0.707	<i>0.899</i>
SEI—Item 4	0.384	0.385	0.453	0.447	0.419	0.402	0.528	0.595	<i>0.844</i>

Note: OPC: Openness to experience; SEN: Self-enhancement; STD: Self-transcendence; PAW: Problem awareness; OEF: Outcome efficacy; DSN: Descriptive social norms; ISN: Injunctive social norms; PEN: Personal norms; SEI: Social entrepreneurship intention. The italic values in the matrix above are the item loadings, and others are cross-loadings. Source: author's data analysis.

Table 4. Discriminant Validities.

Fornell–Larcker Criterion									
	OPC	SEN	STD	PAW	OEF	DSN	ISN	PEN	SEI
OPC	<i>0.786</i>								
SEN	0.595	<i>0.740</i>							
STD	0.740	0.651	<i>0.793</i>						
PAW	0.599	0.504	0.609	<i>0.799</i>					
OEF	0.674	0.627	0.679	0.518	<i>0.745</i>				
DSN	0.443	0.420	0.494	0.532	0.362	<i>0.791</i>			
ISN	0.521	0.538	0.538	0.710	0.473	0.720	<i>0.720</i>		
PEN	0.544	0.577	0.577	0.657	0.510	0.560	0.708	<i>0.832</i>	
SEI	0.426	0.483	0.483	0.549	0.399	0.503	0.616	0.758	<i>0.815</i>

Table 4. Cont.

Heterotrait–Monotrait Ratio (HTMT)									
OPC	-								
SEN	0.698	-							
STD	0.899	0.762	-						
PAW	0.661	0.597	0.672	-					
OEF	0.768	0.899	0.775	0.596	-				
DSN	0.466	0.483	0.524	0.586	0.407	-			
ISN	0.566	0.566	0.576	0.779	0.531	0.897	-		
PEN	0.593	0.580	0.633	0.745	0.583	0.598	0.758	-	
SEI	0.473	0.448	0.525	0.638	0.462	0.586	0.705	0.844	-

Note: OPC: Openness to experience; SEN: Self-enhancement; STD: Self-transcendence; PAW: Problem awareness; OEF: Outcome efficacy; DSN: Descriptive social norms; ISN: Injunctive social norms; PEN: Personal norms; SEI: Social entrepreneurship intention. The italic values in the matrix above are the item loadings, and others are cross-loadings.

#### 4.3. Structural Model Assessment

After achieving satisfactory construct level reliabilities and validities, we next estimated model measurement and path analysis. The adjusted  $r^2$  score for the three input variables (i.e., OPC, SEN, and STD) on the problem awareness elucidates the 40.5 percent change in problem awareness. The model fragment's predictive relevance ( $Q^2$ ) value is 0.242, signifying a medium predictive relevance [56]. The adjusted  $r^2$  value for the exogenous construct (i.e., problem awareness) on the outcome efficacy clarifies the 26.4 percent change in the outcome efficacy. The model portion's predictive relevance ( $Q^2$ ) value is 0.138, demonstrating medium predictive relevance [56].

Model standardised path values,  $t$ -values, and significance levels are exposed in Table 4. The path score between OPC and PAW ( $\beta = 0.273$ ,  $t = 2.563$ ,  $p = 0.005$ ) indicates a significant positive relationship between openness and experience problem awareness. The consequence bids significant statistical support to accept the H1. Next, the path value for SEN and PAW ( $\beta = 0.161$ ,  $t = 1.864$ ,  $p = 0.031$ ) demonstrate the significant positive relationship between self-enhancement and problem awareness. It offers statistical provisions for admitting H2. The path between STD and PAW ( $\beta = 0.103$ ,  $t = 2.508$ ,  $p = 0.006$ ) displays the significant positive relationship between self-transcendence and problem awareness; it offers sustenance to admit the H3.

The path value for PAW and OEF ( $\beta = 0.518$ ,  $t = 6.079$ ,  $p = 0.000$ ) demonstrate the significant positive relationship between problem awareness and outcome efficacy; hereafter, it suggests significant statistical support to accept the H4. The path between DSN and PEN ( $\beta = 0.073$ ,  $t = 0.936$ ,  $p = 0.175$ ) shows the insignificant relationship between the descriptive social norms and personal norms; it offers provisions not to accept the H5. The path coefficient between ISN and PEN ( $\beta = 0.676$ ,  $t = 9.177$ ,  $p = 0.000$ ) indicates a significant and positive relationship between the injunctive social norms and personal norms. The outcome forms significant statistical support to accept the H6. The path value for OEF and SEI ( $\beta = 0.016$ ,  $t = 0.254$ ,  $p = 0.400$ ) demonstrate the insignificant relationship between outcome efficacy and social entrepreneurship intention; henceforward, it proposes insignificant statistical provision to admit the H7. Lastly, the path coefficient between PEN and SEI ( $\beta = 0.750$ ,  $t = 14.698$ ,  $p = 0.000$ ) specifies a significant and positive relationship between personal norms and social entrepreneurship intention. The result offers significant statistics to accept the H8. The results are accessible in Table 5.

#### 4.4. Mediation Analysis

As observed in Table 6, the mediation effect of the PAW was tested with HM1 for the relationship between OPE and OEF. The result reveals that the PAW significantly mediates the relationship between OPE and OEF ( $\beta = 0.141$ , CI min = 0.041, CI max = 0.258,  $p = 0.016$ ) and supports HM1. For HM2, the relationship between SEN and OEF is mediated by PAW. The result displays that the PAW significantly mediates the relationship

between SEN and OEF ( $\beta = 0.144$ , CI min = 0.049, CI max = 0.258,  $p = 0.013$ ); it offers sustenance to accept the HM2. For HM3, the relationship between STD and OEF is mediated by PAW. The result shows that PAW mediates the relationship between STD and OEF ( $\beta = 0.083$ , CI min = 0.015, CI max = 0.175,  $p = 0.045$ ); it offers evidence to admit the HM3. For HM4, the relationship between PAW and SEI is mediated by OEF. The result reveals that OEF insignificantly mediates the relationship between problem awareness and social entrepreneurship intention ( $\beta = 0.008$ , CI min =  $-0.044$ , CI max = 0.068,  $p = 0.402$ ); it affords provisions not to accept the HM4. The HM5-proposed PEN mediates the relationship between DSN and SEI. The result proves that the PEN insignificantly mediates the relationship between DSN and SEI ( $\beta = 0.055$ , CI min =  $-0.032$ , CI max = 0.164,  $p = 0.177$ ); it offers sustenance not to admit the HM5. For HM6, the relationship between ISN and SEI is mediated by PEN. The result confirms that the PEN significantly mediates the relationship between ISN and SEI ( $\beta = 0.507$ , CI min = 0.393, CI max = 0.612,  $p = 0.000$ ); it offers evidence to admit the HM6.

**Table 5.** Path analysis.

Hypo		Beta	CI—Min	CI—Max	<i>t</i>	<i>p</i>	<i>r</i> <sup>2</sup>	<i>f</i> <sup>2</sup>	Q <sup>2</sup>	Decision
H <sub>1</sub>	OPC → PAW	0.273	0.093	0.442	2.563	0.005		0.039		Accept
H <sub>2</sub>	SEN → PAW	0.161	0.030	0.316	1.864	0.031		0.025		Accept
H <sub>3</sub>	STD → PAW	0.278	0.103	0.466	2.508	0.006	0.414	0.036	0.242	Accept
H <sub>4</sub>	PAW → OEF	0.518	0.366	0.647	6.079	0.000	0.268	0.366	0.138	Accept
H <sub>5</sub>	DSN → PEN	0.073	$-0.042$	0.216	0.936	0.175		0.006		Reject
H <sub>6</sub>	ISN → PEN	0.676	0.546	0.786	9.177	0.000	0.533	0.471	0.354	Accept
H <sub>7</sub>	OEF → SEI	0.016	$-0.082$	0.129	0.254	0.400		0.000		Reject
H <sub>8</sub>	PEN → SEI	0.750	0.662	0.829	14.698	0.000	0.575	0.979	0.355	Accept

Note: OPC: Openness to experience; SEN: Self-enhancement; STD: Self-transcendence; PAW: Problem awareness; OEF: Outcome efficacy; DSN: Descriptive social norms; ISN: Injunctive social norms; PEN: Personal norms; SEI: Social entrepreneurship intention. Source: Author(s) own compilation.

**Table 6.** Mediating effects.

Hypothesis (Path)		Beta	CI—Min	CI—Max	<i>t</i>	<i>p</i>	Decision
HM1	OPE → PAW → OEF	0.141	0.041	0.258	2.135	0.016	Mediation
HM2	SEN → PAW → OEF	0.144	0.049	0.258	2.239	0.013	Mediation
HM3	STD → PAW → OEF	0.083	0.015	0.175	1.694	0.045	Mediation
HM4	PAW → OEF → SEI	0.008	$-0.044$	0.068	0.248	0.402	No Mediation
HM5	DSN → PEN → SEI	0.055	$-0.032$	0.164	0.926	0.177	No Mediation
HM6	ISN → PEN → SEI	0.507	0.393	0.612	7.594	0.000	Mediation

Note: OPC: Openness to experience; SEN: Self-enhancement; STD: Self-transcendence; PAW: Problem awareness; OEF: Outcome efficacy; DSN: Descriptive social norms; ISN: Injunctive social norms; PEN: Personal norms; SEI: Social entrepreneurship intention. Source: Author(s) own compilation.

## 5. Discussions

### 5.1. Antecedents and Consequences of Problem Awareness

The results revealed the significant positive effect of openness to change on problem awareness. In line with previous researchers [23,25], this illustrates that open-mindedness, creative behaviour, as well as a willingness to try new things or take risks develop an awareness of the adverse consequences of not acting pro-socially. Results further showed a positive and significant effect of self-enhancement on problem awareness. In line with Yang et al. (2023) [2] and Sedikides (2021) [27], this portrays that individuals' values that seek self-benefits and concern self-interest alert mind-wandering through problem awareness. We found a significant positive effect of self-transcendence on problem awareness across the dataset. Supporting Nordlund and Garvill (2002) [26], this translates that socio-altruistic values associated with collective interest and empathy for others positively correlate to

problem awareness. On the other hand, problem awareness showed a significant and positive effect on outcome efficacy. In line with Yang et al. (2023) [2] and Steg and Groot (2010) [18], this narrates that identifying specific actions to alleviate our values and problems is influenced by the degree to which individuals remain aware of the adverse consequences of not acting pro-socially.

### 5.2. Antecedents of Personal Norm

As for descriptive social norms, results showed an insignificant effect of descriptive norms on personal norms. However, the positive beta value signifies that in the case of an association, the effect of descriptive norms on personal norms should be positive. This finding contradicts the existing literature [38,39], translating that the expected actions based on others' perceptions do not significantly influence one's sense of self-moral obligation to perform pro-social actions. The dataset does not allow us to confirm any significant effect of descriptive social norms on personal norms, perhaps because of contextual differences between this study and earlier ones. Moreover, it could be so that for social entrepreneurship intention among Bangladeshi working adults, other variables are more important rather than descriptive social norms. The path analysis further revealed that the effect of injunctive social norms on personal norms is statistically significant. In line with existing literature [2,38,40,47], this suggests that perceptions of the surrounding community about social entrepreneurship impact individuals' deliberately adhering to normative beliefs to comprehend societal inequalities.

### 5.3. Determinants of Social Entrepreneurship Intention and the VBN Model

Unexpectedly, outcome efficacy showed an insignificant positive effect on social entrepreneurship intention. This finding concurs with Luc (2020) [43], indicating that outcome efficacy represents a less critical factor, wherein individuals' outcome expectations could transform into motivation when backed by favourable conditions. Finally, personal norms revealed a significant positive effect on social entrepreneurship intention among working adults in Bangladesh. It confirms existing research [1,2] advocating that individuals' realisation of their activities' negative or positive impact on others influences them to respond accordingly based on their values and norms and engage in social entrepreneurship. As for the indirect effects, problem awareness is found to significantly mediate the effect of openness to experience, self-enhancement, and self-transcendence on outcome efficacy.

On the other hand, outcome efficacy showed insignificant mediating effects on the relationship between problem awareness and social entrepreneurship intention. These findings partially confirm our theoretical assumptions of the VBN model, translating those values, such as openness to experience, self-enhancement, and self-transcendence, influence awareness of consequences and assumption of responsibility that contribute towards social entrepreneurship intention among working adults [16,19]. However, the results do not allow us to infer any significant mediating effect of personal norms on the associations between descriptive social norms and social entrepreneurship intention. Perhaps, it could be so that social norms (e.g., descriptive social norms) directly affect social entrepreneurship intention, as Naznen et al. (2022) [1] observed. Interestingly, personal norms significantly mediate the effect of injunctive norms on social entrepreneurship intention. This finding endorsed the existing literature [37,39,40], translating that injunctive norms need to be internalised as personal norms to form social entrepreneurship intention among working adults.

## 6. Conclusions

Social entrepreneurship, as a tool to create value in environmental and social terms beyond mere profit maximization, addresses certain key issues of sustainable development and SGD [12]. Thanks to the limited government support towards addressing social issues, social entrepreneurship is emerging as a strong determinant for socio-economic development in developing countries. We answer the call for further research to consolidate

potential factors influencing social entrepreneurship intention formation, particularly in developing countries' perspective [1,2,8] by examining social entrepreneurship intention among working adults, using a dataset from Bangladesh under the premise of the value–belief–norm model. We used a cross-sectional design to arrange an online questionnaire and collect quantitative data from 187 respondents. SEM-PLS was used for analysis. Findings revealed a significant positive effect of openness to change, self-enhancement, and self-transcendence on problem awareness. Problem awareness was found to affect outcome efficacy and social entrepreneurship intention significantly. Finally, personal norms showed significant positive effects on social entrepreneurship intention. The mediating role of problem awareness and personal norms was further confirmed. In terms of contributions to the literature, this study majorly enriched knowledge regarding social entrepreneurship intention formation, particularly from developing nations' perspectives. Moreover, by using the VBN lens and integrating relevant variables to develop the presented model for examining social entrepreneurship intention, this paper extended the value–belief–norm theory, as well. Apart from extending the lens of VBN and enriching the current literature on social entrepreneurship, insights from this study could assist policymakers, social organizations, and social entrepreneurs in formulating relevant policies and sustaining social ventures. As for limitations, this study's list of independent variables remains non-exhaustive. Hence, future researchers could integrate other relevant variables into the presented model. Additionally, the cross-sectional approach and single data source limit the generalizability of this study. Thus, it could be worthwhile for future researchers to use a longitudinal approach with a more extensive and diverse data set. Finally, as we collected data online, relevant responses from representatives without access to the Internet were missed. Hence, to yield further rigorous results that should extend and refine the scope, antecedents, and consequences of social entrepreneurship in a broader perspective, future research avenues could explore multiple methods of data collection.

**Author Contributions:** Conceptualization, S.A.F., A.A.M. and H.J.; methodology, S.A.F., A.A.M. and N.H.; research instrument, S.A.F. and A.A.M.; validation and formal analysis, N.H. and A.A.M.; investigation S.A.F. and S.F.P., writing—original draft preparation, S.A.F., H.J. and S.F.P.; writing—review and editing, S.A.F. and M.H.A. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by the MMU-USTC Joint Research Grant.

**Institutional Review Board Statement:** The local ethics committee of the University of Science and Technology Chittagong, Bangladesh, ruled that no formal ethics approval was required in this paper titled "Progressing Sustainable Development through Social Entrepreneurship-Modelling Intentional Predictors using Value–Belief–Norm Model", because (a) the data are completely anonymous with no personal information being collected; (b) the data are 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 dependent 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. 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. 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 were collected from anyone under 18 years old.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix A

### Self-Enhancement (Lindeman & Verkasalo, 2005) [49]

Please indicate to what extent the following are important as a guiding principle in your life.  
(Not very important 1—Very important 5)

Social power

Authority

Success

Capability

Ambition

### Openness to Change [49]

Please indicate to what extent the following are important as a guiding principle in your life.  
(Not very important 1—Very important 5)

Gratification of desire

Self-indulgence

Daring

Challenging life

Creativity

Independence

### Self-transcendence [49]

Please indicate to what extent the following are important as a guiding principle in your life.  
(Not very important 1—Very important 5)

Broad mindedness, beauty of nature

World at peace

Equality

Wisdom

Unity with nature

Helpfulness

Forgiveness

Loyalty

### Problem Awareness [50] (Strongly Disagree 1—Strongly Agree 5)

Social inequality is a serious problem.

Social problems need collective action to bring societal uplift.

I am anxious about social challenges emerges from the social disparities.

Social inequalities are the major reasons of economic challenges.

Overall, I am concerned about social issues triggering the social problems.

### Outcome efficacy [50] (Strongly Disagree 1—Strongly Agree 5)

I think taking responsibility to solve social issues are important.

It is important to offer employment opportunities to all segments of community.

It is advisable to provide equal health and education opportunities for all.

It is worthwhile to reduce the social differences between the communities.

I feel responsible for the personal healthcare.

### Descriptive Social Norms [35] (Strongly Disagree 1—Strongly Agree 5)

People that are important to me tries to protect the civic welfare system.

I know people that make efforts to lessen the social inequality.

I know many people that always attempt to promote the social well-being.

Many people around me make promote the social equality.

Promoting social welfare is important among my community.

### Injunctive Social Norms [35] (Strongly Disagree 1—Strongly Agree 5)

Most of people in my companionship should work to reduce the social disparity of community.

Most of significant people in my life are making efforts to bring social equality.

Most of my peers willingly engage in promoting the social well-being although it might take more efforts.

Most of my peers enthusiastically engage in social welfare of community even though it might be costly.

Most of people among my peers should to work to achieve the community social well-being.

### Personal Norms [50] (Strongly Disagree 1—Strongly Agree 5)

I feel morally accountable to reduce the social disparity.

People like me should use the work to curtail the social inequality.

I feel morally obliged to make efforts to promote the social well-being of community.

I morally think that working for community well-being is important, regardless of what others do.

I feel personally obliged to work for the promotion of community well-being.



**Social Entrepreneurial Intention [51]** (Strongly Disagree 1—Strongly Agree 5)

I intend to start a social enterprise to promote social equalities.

I will always try to make efforts to curtail the social inequalities in the future.

I plan to use my knowledge and skills to uplift the community welfare.

I would be willing to develop a social organization building prosper society.

I can predict that I will engage myself in bridging the social differences in my community.

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