

Article

Impact of Environmental, Social Values and the Consideration of Future Consequences for the Development of a Sustainable Entrepreneurial Intention

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Abstract: Sustainable entrepreneurship focuses on finding ways to monetize future products, nature conservation, life support, and communities. Therefore, the intention has been identified as one of the key drivers to perceive business opportunities and ultimately leverage them, which increases interest in investigating it, especially from a sustainability perspective. The purpose of this study was to investigate the intention of sustainable entrepreneurship through a modified version of the theory of planned behavior based on survey data of 520 university students studying in Punjab, Pakistan and using structural equation modeling for quantitative analysis. The study sought to incorporate three additional constructs (environmental values, social values, and consideration of future consequences) to explain the relationship between the antecedents of sustainable entrepreneurial intention. This study shows that sustainable entrepreneurship, social norms, attitudes, and perceived behavioral control praise students' sustainable intentions. Environmental values, intrinsic and extrinsic rewards, and consideration of future consequences (CFC-F and CFC-I) indirectly influence sustainable entrepreneurial intentions. The study also highlights the contradictory roles of CFC-I in reversing the pursuit of sustainable entrepreneurship. Indeed, the finding proposed that educational and other practitioners can improve attitudes and behaviors by promoting sustainable entrepreneurship through value creation and forward-looking activation strategies.

Keywords: sustainable attitude toward entrepreneurship; future orientation theory; environmental value; social value; sustainable entrepreneurial intentions

1. Introduction

Entrepreneurship and sustainable entrepreneurship begin with recognizing possibilities [1,2]. Therefore, sustainable development may be considered the greatest vital difficulty of our time. Depletion of the ozone layer, climate change, and devastation of biodiversity is showing the negative effects and results of those processes on species [3,4]. However, scholars have argued that doing business can maintain ecosystems, respond to weather trade, reduce environmental degradation and deforestation, enhance agricultural practices and freshwater materials, and maintain biodiversity [5,6]. In current years, sustainable entrepreneurship has grown in recognition and become one of the most dynamic areas, which has led to the upward thrust of entrepreneurial answers to environmental, social, and monetary troubles, as demonstrated by means of improvement of for-income establishments [7]. Most of the prescriptive outlines and models given so far are primarily

based on related areas of knowledge consisting of environmental economics and social entrepreneurship [8,9]. Hence, balancing the triple bottom line may imply additional loss by potential sustainable entrepreneurs among non-public and economic blessings and environmental and/or social costs, which are generally prevalent on a bigger social scale. Indeed, sustainable entrepreneurs and their choices must take into account the current development requirements without compromising the needs of future generations [10]. In this context, sustainable entrepreneurs are defined by scientists as individual/economic actors who integrate the objectives of social, economic, and environmental entrepreneurship into sustainable enterprises/organizations in terms of asset creation and business goals [11,12].

Social, environmental, and sustainable entrepreneurship are major kinds of entrepreneurship that have emerged over the years to deal with and clear up essential social complexities [9,13,14]. In this way, these types have been able to speed up the entrepreneurial process; therefore, they are interested in knowing their intentions and underlying motives to become such entrepreneurs among educated young people in the future. Thus, at the social level, entrepreneurship makes an important contribution to job creation and economic growth [15]. However, sustainable entrepreneurship plays an essential role in achieving important sustainable development goals. Change in living status, health, work, innovation, organization, sustainable cities and communities, responsible production, and climate trade requires the participation of public interest groups [16]. These issues can affect an individual's goal of starting a new sustainable business, which is generally considered the major and most impartial predictor of entrepreneurial behavior [17]. To date, our understanding of the role of these issues in the individual's goal to be a sustainable entrepreneur is limited; in particular, these intentions are especially important to understand and consider business decisions, such as owning a business or establishing or modifying an existing business in accordance with sustainability norms under the sustainable development goals [18–21]. Nevertheless, although entrepreneurship has been growing as a hobby, in various entrepreneurial types there may be a lack of proof that the current younger generation—and specifically university graduates—could have enough entrepreneurship, social awareness, and extensive potential for a challenging movement that does not seek to profit from the cost of a deteriorating future [22]. Through previous research, we have understood that the first step to achieve this is to modify the current purpose model with sustainable entrepreneurial intention measures consisting of value and sustainability orientation [23].

However, preceding studies mainly targeted work values and trendy altruism to explain the goal shaping of sustainable entrepreneurship. Therefore, this study suggested the use of social (intrinsic and extrinsic rewards) value as well as environmental values, showing that those who take part in sustainable development should foresee the future results of their actions to consider intergenerational equity. To date, research on sustainable entrepreneurship has largely ignored the role of predicting future consequences [15,24]. Although sustainable entrepreneurship is context-specific, conventional definitions have expanded to encompass a wide range of phrases (e.g., social environmental values) [25]. Financial cost introduction has historically been a vital part of conventional entrepreneurship, and it is used by entrepreneurs to take numerous steps to combine or give up one-of-a-kind financial value [26]. Basically, sustainable entrepreneurship aims to preserve these values in the long term and also combine social, monetary, and ecological benefits. [27]. The literature has widely shown that social entrepreneurs are associated with environmental values, empathy, and intrinsic reward [28,29]. Consequently, in this field of social entrepreneurship, the already existing literature provides limited insight into the startup of intention [16,28] and even less insight into the field of sustainable entrepreneurship [30]. Therefore, this study aims to explain the formation of sustainable entrepreneurship intention by incorporating the theory of planned behavior (TPB) [31]. One study completely based on the mediating role of the TPB's antecedents takes into account the role of work values in sustainable intention [32]. However, social and environmental values and consideration of the future have not yet been considered for the development of sustainable

entrepreneurial intention. To fill this void, this study uses an integrative framework. It examines the task of social (intrinsic and extrinsic) environmental values and, in particular, that of modifying entrepreneurial intention and converting its types into type-specific sustainable entrepreneurship, in order to take into account the future consequences on sustainable entrepreneurial intention mediated by two dimensions of TPB: attitude toward sustainability and perceived behavior control.

The rest of the article is organized into the following sections. Section 2 contains insights from the sustainability literature, based on how social and environmental issues are addressed and how future outcomes can affect the formation of sustainable entrepreneurship goals to varying degrees. Sections 3 and 4 describe our method, examining its design and outcomes. Section 5 illustrates our findings and has implications for government and school professionals. We will conclude by presenting limitations and opportunities for future studies.

2. Review of Literature and Hypothesis Development

2.1. Sustainable Intention Formation

Entrepreneurship is generally considered a deliberately organized attitude. In various contexts of entrepreneurship, such as sustainable entrepreneurship, interest in entrepreneurial intention is limited [17,25,28,33]. The desire to investigate goals in a sustainable entrepreneurial context stems from the difference between sustainable and traditional entrepreneurs. First, sustainable entrepreneurs have a broader angle, and second, their recognition of different types of values and ideals (social, environmental, and economic) varies; these two aspects notably affect their environmental concerns and set off human beings' engagement in sustainable practices [4,29]. Different desires emerge from the values and motivations of sustainable marketers [25,34] as well as one-of-a-kind classifications between sustainable and conventional entrepreneurs and their intentions, which have an effect on the way businesses perceive them and put their values into action (i.e., sustainable business actions) [35,36]. Intention refers to the state of cognition immediately prior to executing an action [37]. Entrepreneurship and sustainable entrepreneurship are deliberate processes and planned actions that an individual seeks to perform after being exposed to and having carefully considered stimuli [17,38]. Although sustainable entrepreneurship has contributed significantly to sustainable development [39], existing research tends to examine only one or two aspects of value creation [14]. Thus, the TPB is considered the most and consistently verified theory on the formation of entrepreneurial aim [17,40,41]. In a similar way, Schlaegel and Koenig [42] confirmed the TPB's empirical consent based on the results of 98 studies through a meta-analysis study, compared to other entrepreneurial intention models. Considering the proactive part of the TPB and reviewing its use and relevance in the literature on entrepreneurship, it was decided that TPB should be used [23,31]. The TPB is entirely based on these three social and personal factors (the antecedents of entrepreneurial intentions) that are considered to be the best predictors of behavior: personal attitudes toward sustainability (perceived desirability), subjective norms (perceived social norms), and perceived behavioral manipulation (perceived feasibility) [17]. It considers, adapts, and introduces intrinsic and extrinsic rewards, values of surroundings, and consideration of future effects of sustainable entrepreneurial intention (SEI) to fit the previous models to sustainable entrepreneurship [23]. We argue that, when considering the future results of individual attitude with respect to social and ecological values, these may be identified as character history variables. The variables are explained, and the hypothesis is formulated in more detail below.

2.2. Antecedents of Entrepreneurial Intention and Hypothesis Development

The first speculation on this observation, which pertains to the history of sustainable entrepreneurship as a key variable, is the idea of deliberate behavioral attitudes, social norms, and behavioral manipulation for individual sustainable intentions as the way a character behaves and shows their desire. The sustainability course includes the ideas

of economic, ecological, and social moral sustainability [43]. According to Kuckertz and Wagner [44], sustainability orientation definitely relies on behavioral attitudes and beliefs about environmental protection and social duty and is concerned with the established order of the latest sustainability-oriented companies. In the study of environmental practices, Kruse et al. emphasize attitudes as the number one predictors of environmentally friendly intentions [45] and as essential determinants for enforcing sustainability practices in a business context [46]. In this regard, the sustainability mindset predicts a propensity for sustainable entrepreneurship [47].

Second, an individual's inner psychological mechanism is used to control the subjective norms as "in a social pressure of performing or not performing the task" [31], which can either strengthen or weaken intentions [48]. Social norms perceived in the context of Mair and Noboa's model [49] are measured in terms of moral obligations [50]. Hockerts [28] criticized this decision, arguing that moral obligations account for "the degree to which they feel that they must act according to the social norms of their social peers in the face of an ethical challenge."

Third, it uses perceived behavioral control to conceptualize feasibility. Perceived behavioral control is a structure needed to "attempt to deal with situations where people cannot have full discretionary control over the behavior of interest" [51]. Perceived self-efficacy (i.e., perceived feasibility in Ulhøi's entrepreneurial event model) [52] has a profound effect on entrepreneurial intention and entrepreneurial behavior, individual participation in civic activities, or whistleblowing, and it is a predictor of new venture creations [53,54]. Controllability refers to the extent to which Seungwoo and Hyelin [55] have access to means to control their target behavior. This may be extremely crucial because it is hard to cure the difficulties of social problems associated with sustainable development; in fact, some scholars have noted them as "depraved issues" [56]. Therefore, we expect individuals with a high level of behavioral control in relation to sustainable entrepreneurship to be more likely to develop sustainable entrepreneurial intentions.

Hypothesis 1 (H1). *The antecedents of TPB, (a) ATS (attitude toward sustainable entrepreneurship), (b) SN (social norms), and (c) PBC (perceived behavior control), are positively related to students' SEIs.*

2.2.1. Environmental Values and Attitude towards Sustainable Entrepreneurship

Because job decisions are well linked to the former, they reflect attitudes toward specific types of jobs [57,58]. Work values enable, encourage, and drive the entrepreneurial behavior of individuals through expression and motivation. The present work on social entrepreneurship has recognized environmental price and different kinds of work values [59,60]. Environmental values describe a character's altruistic conduct (e.g., universalism, empathy) and tendency to be concerned with the environment and different individuals in society with enthusiasm and passion [61]. In comparison with environmental values, a person's preference for occupational protection, balance, and harmony within the workplace is described as an opportunity [62,63]. The current study focuses on these three study values (environmental values, intrinsic and extrinsic rewards). As they are closely related to various aspects of entrepreneurship and the creation of various values, they represent intrinsic rewards and environmental values and are clearly related to the environmental and social components of price creation. Therefore, they are positively associated with SEI. At the same time, they are also feasible as the extrinsic reward is closely associated with financial cost. Likewise, environmental values are intently associated with a sustainable attitude and play a crucial role within the sustainable improvement of entrepreneurship; this is because they emphasize and promote the ecological and social aspects of value creation in exploring various possibilities [57,64,65]. Two aspects of the existing literature are covered, including environmental and social effects, and social value creation is largely ignored, particularly with regard to sustainable entrepreneurial intentions [27,66]. Creating social value is crucial to an individual's desire to be socially en-

trepreneurial, and environmental values and intrinsic rewards are the driving force behind action to solve social problems [67]. This is a key requirement for sustainable ventures [68], and it plays a central role in environmental value, having a positive relationship with ATS and SEI.

Hypothesis 2 (H2). *In sustainable entrepreneurship, your attitude will positively intervene in the relationship between environmental value and sustainable entrepreneurial intentions.*

2.2.2. Social Work Value (Intrinsic and Extrinsic Rewards), Attitude toward Sustainability, and Perceived Behavior Control

Sustainable entrepreneurship joins ecological, social, and economic values [5]. Intrinsic rewards play an important role in creating, recognizing, evaluating, and utilizing business opportunities that are closely related to environmental and social issues, along with prose motives [69]. According to Hockerts and Wüstenhagen [27], sustainable entrepreneurship depends on the opportunities and interests of the entrepreneur and is used to restore the balance of natural resources related to ecological and social values. Although extrinsic rewards are the driving force behind entrepreneurship, the literature shows that tradition and a desire for energy are negatively associated with environmental attitudes [59,69,70].

Therefore, while intrinsic praise has a positive association with SEI, there may be a poor link between extrinsic rewards through ATS and SEI. Hockerts [28] described that the issues related to society and the environment are difficult to resolve as the existing solutions to solve these issues often do not work. Furthermore, the literature suggests that the complexity of these social problems and the introduction of social values may be solved through innovation and positive ATS [16,71,72]. Ample evidence also shows that entrepreneurial choice is linked to innovation, autonomy, and risk taking [72–74]. As mentioned earlier, perceived entrepreneurial desirability is one's level of belief that they have succeeded in acquiring a particular business. This suggests that an individual should favor a job in which they can act according to their values and that would enable them to be successful in that occupation [75,76]. In this study, in addition to examining behavior control, we also conceptualize feasibility, which can be calculated by self-efficiency [65], and show to what extent a person is able to perform a task [31]. In addition, existing research shows that individual behavior favoring freedom, innovating, and taking risk is associated with starting an entrepreneurial career [77]. This implies that in previous studies, perceived feasibility was related to intrinsic reward [22], and a positive correlation exists between intrinsic reward and SEI; the current study uses it by associating perceived behavioral control with intrinsic reward, making it work in a similar way. As intrinsic rewards and sustainable entrepreneurship show a positive correlation, autonomy and innovative energy are related to beginning an entrepreneurial career. Considering the empirical and theoretical evidence examined, the following hypotheses are proposed:

Hypothesis 3 (H3). *The attitude in sustainable entrepreneurship has a positive effect on the relationship between praise and sustainable entrepreneurial intentions.*

Hypothesis 4 (H4). *Controlling perceived behavior in sustainable entrepreneurship has a positive effect on the relationship between praise and sustainable entrepreneurial intentions.*

Hypothesis 5 (H5). *Attitude in sustainable entrepreneurship negatively affects the relationship between external rewards and sustainable entrepreneurial intentions.*

2.2.3. Consideration of Future Consequences, Attitude toward Sustainability, and Perceived Behavior Control

The impact of sustainable entrepreneurship on social and ecological values, as proposed by Shepherd and Patzelt [8], may be noticeable only in future generations [10].

Hence, sustainable entrepreneurs must recognize the results of entrepreneurial actions to save the environment and society for the new generation, thus acquiring a long-term perspective [8]. We have adopted the method of considering future outcomes (CFC) to envision and measure these future directions in an intergenerational context. CFC is described as “the degree to which an individual considers the potential consequences of current behavior and attitudes to the extent that they are affected by the potential consequences” [24]. Researchers have found that CFC may be divided into two temporal views: consideration of future results (CFC-F) and consideration of immediate consequences (CFC-I). When people carefully consider future results with their forward-looking attitudes, they can cushion the benefits of short-term pleasures. On the other hand, if they are more concerned with the immediate consequences of their attitudes and actions, they are much less progressive because they are openly subject to the immediate benefits [78]. As with all sustainable conduct, beginning sustainable entrepreneurship is likely to imply short-term sacrifices and long-term advantages [10]; thus, individuals with the intention of beginning a sustainable business must consider future results in their plans while managing instant costs [79]. Then, we argue that individuals who are relatively tuned to future outcomes (CFC-F) may have a positive mindset in the direction of sustainable entrepreneurship and behavior due to the fact they may be more willing to address the wishes of future generations by sacrificing their very own concurrent benefits. This may have to do with the reality that future-questioning people are more prepared and self-efficient enough to obtain short-term benefits and consequently make more conscientious choices with regards to the future [24]. Regarding environmental issues, many studies have shown that CFC is definitely correlated with environmental attitudes and behaviors, and a greater CFC degree is associated with extra commitment to the surroundings [80–82]. For instance, an excessive degree of CFC can also imply that a person is highly concerned about future results, no longer concerned about immediate effects, or both [74]. High CFC scores could imply that an individual is fairly involved in future consequences, no longer worried about immediate consequences, or both; as a result, we expect people with high CFC-F to create beneficial conditions that are closer to sustainable entrepreneurship attitude and perceived behavior control compared to individuals with high CFC-I. This results in the following hypotheses:

Hypothesis 6 (H6). *Attitudes towards sustainable entrepreneurship will have a positive impact on the relationship between high CFC-F content and sustainable entrepreneurship.*

Hypothesis 7 (H7). *Attitudes towards sustainable entrepreneurship will negatively affect the relationship between high CFC-I levels and sustainable entrepreneurial goals.*

Hypothesis 8 (H8). *Perceived behavior control will positively affect the relationship between high CFC-F and sustainable entrepreneurial intention.*

Hypothesis 9 (H9). *Perceived behavior control will negatively affect the relationship between high CFC-I and sustainable entrepreneurial intention.*

The research framework is presented in Figure 1.

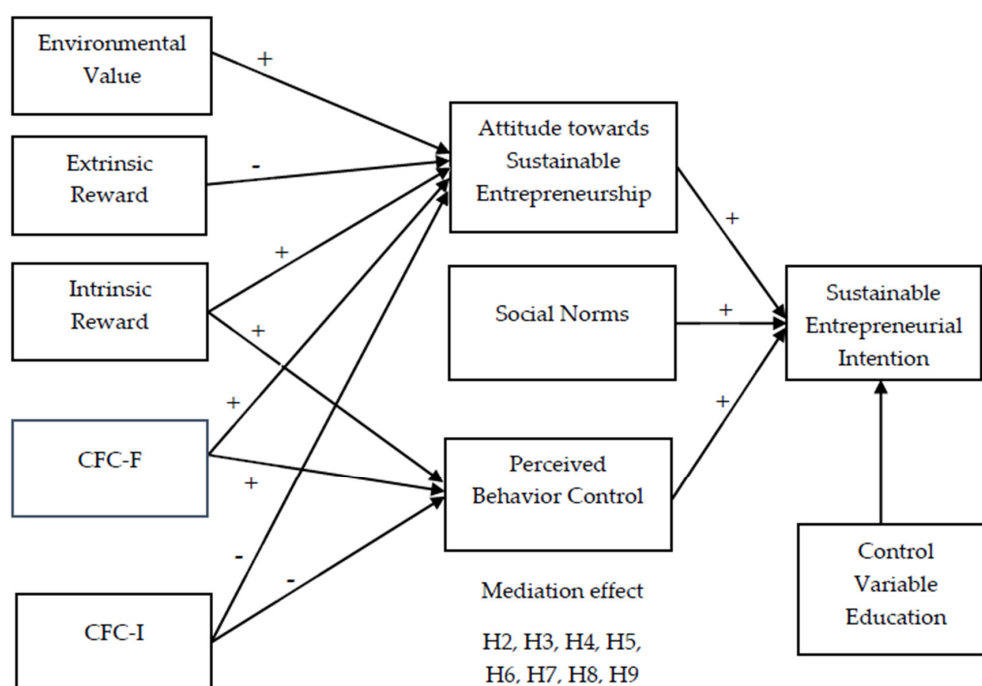


Figure 1. Research framework.

3. Data Collection and Research Methodology

3.1. Research Design

In this research, primary information was gathered by conducting a survey that reflects the respondents' general thoughts [83,84]. Since the intentional procedure is highly susceptible to preliminary conditions, we used a sample of the population including only the students whose approaches are sensitive to preliminary conditions [85]. Therefore, the study should not only measure the intentions of sustainable entrepreneurs before the actual action takes place, but it should also include those who are not ready to embark on a sustainable enterprise [17]. Contrary to previous research on sustainable entrepreneurship intention, the current study found that university students have a higher potential to become entrepreneurs if they receive the appropriate education necessary to start a business and conduct it successfully [86,87]. Despite concerns about the possibility of generalization, we used convenience sampling techniques that are often employed in entrepreneurship research [17,88,89].

Therefore, in this research, the largest Punjab province was specifically selected for gathering the data on students enrolled in university. Data collection was conducted from September to November 2019 using a quantitative study design. A total of 16 of the 66 universities in the province were chosen for data gathering. Measures factors had to be identified to ensure the validity of the structure, so a two-step process was carried out before the actual field review. First, six field experts who were working on sustainable corporate development were contacted.

Second, we pre-tested 35 students from five universities to fill out a questionnaire for collecting real data. All questions related to TPB and work value and consideration of future consequences were measured on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) to avoid the risk of general common method bias and to enhance the validity and relevance of the data provided by the respondents. Similarly, the Herman single factor test was used to investigate the variance of the common method [90]. The results show that this study identified nine factors that accounted for a total of 54% of the total variance. The first element of the data only accounts for 28% of the variance; therefore, there does not seem to be a common factor explaining such variance. When using

SEM-AMOS, the value of the variance inflation coefficient is used to determine the overall methodological deviation, so this value is below the threshold (3.3) or all nine factors, indicating that no pathological linearity or aberrant deviation is observed [91]. In total, we accrued statistics from the records of 520 individuals by administering questionnaires, selecting them among universities that offer key subjects related to enterprise and non-enterprise. As these areas make the greatest contribution to sustainable entrepreneurship, students of those disciplines were selected [92,93]. Because such perspective in most cases targeted youth, we selected respondents between 20 and 30 years of age.

3.2. Participants

We distributed questionnaires, of which 5% were cancelled because they had incomplete or missing information. As a result, approximately 520 respondents participated. The table below shows that the average age of participants was 25 years. Of those surveyed, 62% were male, and 37% were female. Respondents studied business (60%) and non-business (39%). A total of 24% of those surveyed had a family business background, 75% had entrepreneurship education, and 16% had work experience (Table 1).

Table 1. Demographic profile of the graduates ($n = 520$).

Dimensions	Category	Frequency	Percentage
Gender	Male	324	62.4%
	Female	196	37.7%
Age	<20	163	31.3%
	21–25	291	56.0%
	26–30	66	12.7%
Degree	Bachelor's	158	30.4%
	Master's	292	56.2%
	Others	70	13.5%
Subject	Business	314	60.4%
	Non business	206	39.6%
Have you received entrepreneurship education?	Yes	391	75.2%
	No	129	24.8%
Have your parents ever run a business before?	Yes	126	24.2%
	No	394	75.8%
Are you currently employed?	Yes	85	16.8%
	No	435	83.7%

3.3. Measurement Scales of the Study

First, work value was measured based on the findings by Peterman and colleagues [94]. The work values of three main factors, namely environmental value, intrinsic reward, and external reward, are shown in this calculated scale. The scale is designed to measure (1) an individual's motivation to help society and their concern for the environment, and (2) the value of work done by a person to which they are attracted for money, respect, personal interest, and status. Second, we used a scale developed by Strathman et al. [24] to calculate consideration for consequences, identifying and recognizing present and future results [78]. Third, this research has used an upgraded version of Linan and Chen's scale [95] to measure attitudes toward sustainable entrepreneurship. The subjective normative scale used to measure participants aims to assess the extent to which their closest friends, family members or students believe they will see them as sustainable entrepreneurs [41]. We use Kolvereid's three-point scale for Sustainable Entrepreneurship to measure the control of perceived behavior [96], which has been supplemented by Linan and Chen [95] and has also been applied to sustainable entrepreneurship. Fourth, to measure entrepreneurial intentions, we applied Autio et al.'s [97] three-item measurement, also adopted by Linan and Chen [95]. This scale indicates the level of interest of the participants as well as their intention to embark on sustainable entrepreneurship.

3.4. Control Variable

This study included a dummy control variable to consider alternative explanations for the predicted relationships in the model. In other words, the measured exposure to entrepreneurship controls sustainable entrepreneurship education because high awareness and self-efficacy can lead to strong intentions to start a new business [98,99].

4. Results

4.1. Measurement Model

This study used AMOS Graphics 7.0 for the analysis. Through a validation and reduction process, we can easily verify the validity of the elements used before the construction of its last model. It also employed confirmatory factor analysis. Extensive studies have been conducted using SEM to analyze the confirming factors validating the impact score for each correlation [100]. For this purpose, the following parameters were observed at the given intersection to test the quality and reliability of the setup used for this: (1) factors loading ≥ 0.50 ; (2) average variance extracted (AVE) ≥ 0.5 ; (3) Cronbach's alpha (AL) ≥ 0.70 [101]. Before we test the research hypothesis, we review the model's fit indices to make sure they fit the sample data. Hence, the indices value for the final proposed model confirmed the accepted fit (AGFI = 0.91, GFI = 0.94, X2 test statistic/df = 4.87, CFI = 0.93, NFI = 0.96, RMSEA = 0.04). The verification of these indices provided information for further analysis, and the results of the statistical indices are presented in Table 2. To check the given data, we used a two-step method to estimate the structural equations recommended by Anderson and Gerbing [102] and evaluate the final structure of the model. To do this, we evaluated the reliability of the constructs (Table 3) and the discriminant validity (Table 4).

Table 2. Measurement of model fit structural model.

Goodness-of-Fit Measure	Recommended Values	Structural Model Results	Source
X2 test statistic/df	>1.0	2.3	[103]
AGFI (Adjusted goodness-of-fit index)	>0.90	0.92	
GFI (Goodness-of-fit index)	>0.90	0.94	
CFI (Comparative fit index)	>0.90	0.91	
NFI (Normed fit index)	>0.90	0.93	
RMSEA (Root mean square error of approximation)	<0.08	0.04	

Table 3. Reliability of the constructs and measurement items.

Construct	Measurement Items	FL	AL	CR	AVE	VIF
Environmental values [49]	A process with which I can earn and solve tasks	0.81	0.90	0.86	0.66	2.3
	A process that is valuable to the most vulnerable members of society	0.85				
	A process that offers me the place where I can help the poor in society	0.79				
	A process that can make the world a higher living space	0.83				
	A task that involves respect for the surroundings	0.83				
Extrinsic reward [104]	An activity that offers me the most conceivable compensation		0.86	0.80	0.76	2.1
	A job that is respected and raises my status					
	An activity that has a place for progress and advancement in business					
	A process that could bring me great revenue					

Table 3. Cont.

Construct	Measurement Items	FL	AL	CR	AVE	VIF
Intrinsic reward [59]	Activities that make it possible to work independently	0.82				
	A job where I can participate in important decisions	0.83	0.87	0.84	0.63	2.8
	A process in which I can work creatively	0.74				
	A process that is more difficult for me	0.81				
	An activity where new things can be learned and skills improved	0.79				
CFC-F [24]	I assume that it is far more important to carry out behaviors with critical long-range effects than immediate consequences	0.72				
	I think it's important to take significant risks related to bad consequences	0.74	0.89	0.82	0.59	2.4
	I want to serve my immediate happiness to achieve certain future results	0.85				
	Often times I interact in a certain behavior to get results that may not end for many years	0.78				
	I focus again on how things will be in the coming era to convince things with daily behavior	0.74				
CFC-I [78]	My suitability is a big thing within the decisions I make or the movements I proceeds	0.78				
	The best way to determine my behavior is to see the results of my immediate move	0.83	0.86	0.88	0.63	2.5
	The convenient way I act is to satisfy local worries and find out that fate can handle itself	0.79				
	I often forget warnings of potential future problems	0.78				
	The most effective action to be taken on the ground is whether I will deal with fate issues that may arise at an overdue time	0.77				
Attitude towards sustainable entrepreneurship [95]	Among diverse alternatives, I could be a sustainable entrepreneur					
	Being a sustainable entrepreneur could give me great pride		0.82	0.86	0.65	1.6
	If I were given a favorable environment and quality, I would definitely prefer to start a sustainable business					
	Starting a business as a sustainable entrepreneur is attractive to me					
	Being a sustainable entrepreneur is the more advantageous field					
Social norm [41]	Your fellow and students	0.85				
	Your best friends	0.87	0.82	0.89	0.73	2.1
	Your related family members	0.85				
	I have knowledge of sustainable entrepreneurship to start a sustainable enterprise	0.70				
Perceived behavior control [95,96]	If I am looking to build a sustainable business, it can be an opportunity for success	0.82	0.88	0.91	0.63	1.5
	I can handle the running system of a sustainable new company	0.83				
	If I have a wish, I might want to become a sustainable entrepreneur without any problems	0.82				

Table 3. Cont.

Construct	Measurement Items	FL	AL	CR	AVE	VIF
Sustainable entrepreneurial intention [95,97]	Starting my independent business and transforming myself into a sustainable entrepreneur could be very sparkling for me	0.78				
	Understand market opportunities to improve the latest goods and/or services	0.83				
	After choosing this profession, my goal is to become a sustainable entrepreneur	0.78				
	My focus is on starting a sustainable enterprise that will solve a sustainability disorder in the next 5 years	0.86	0.92	0.94	0.73	2.6
	If I could install my own business it would improve my sustainable development	0.88				
	I will use herbal assets properly after becoming an entrepreneur	0.85				
	If I could start my personal enterprise, I would choose social goods rather than monetary profits	0.88				
	I am ready to work to be a sustainable entrepreneur	0.85				

Note = FL = factor loading, CA = Cronbach's alpha, CR = composite reliability, AVE = average variance extracted, VIF = variance inflation factor.

Table 4. Discriminant validity.

	ENV	EXT	INT	CFC-F	CFC-I	ATS	SN	PBC	SEI	EE
ENV.	0.81									
EXT.	0.52	0.87								
INT.	0.46	0.42	0.79							
CFC-F	0.40	0.56	0.44	0.76						
CFC-I	0.38	0.34	0.43	0.32	0.79					
ATS	0.49	0.33	0.40	0.34	0.30	0.80				
SN	0.37	0.40	0.29	0.32	0.50	0.46	0.85			
PBC	0.50	0.54	0.60	0.48	0.47	0.36	0.35	0.79		
SEI	0.46	0.63	0.32	0.51	0.37	0.46	0.54	0.56	0.85	
EEa	0.05	0.04	−0.04	−0.06	0.01	−0.14	0.11	0.06	0.07	1

Note = Diagonal values represent the esquire root of average variance extracted, a = control variable, ENVR. = environmental value, EXTR. = extrinsic reward, INTR. = intrinsic reward, CFC-F = consideration of future consequences, CFC-I = consideration of immediate consequences, ATS = attitude toward sustainable entrepreneurship, SN = social norms, PBC = perceived behavior control, SEI = sustainable entrepreneurial intention.

4.2. Discriminant Validity

Table 4 suggests the discriminant validity standards when the square root of AVE is higher than the correlation among constructs [105]. This reveals that the collected data are free of social needs because all configurations are significantly different from each other and are not interrelated.

4.3. Structural Model Testing

To obtain the estimated result of the proposed relationship (direct or indirect) AMOS was used based on structural models. Figure 2 shows significant positive correlations as follows. First, the TPB was employed in relation to H1a, H1b, and H1c to evaluate the role of behaviors, social norms, and behavioral control in sustainable intentions. These results fully support the direct relationships between ATS, SN, PBC, and the mediating variables of ATS, PBC, and SEI in the directional relationship. These results are consistent with the

previous literature [9,106] and confirm the understanding that the relationship with SEI is more complex than a linear one.

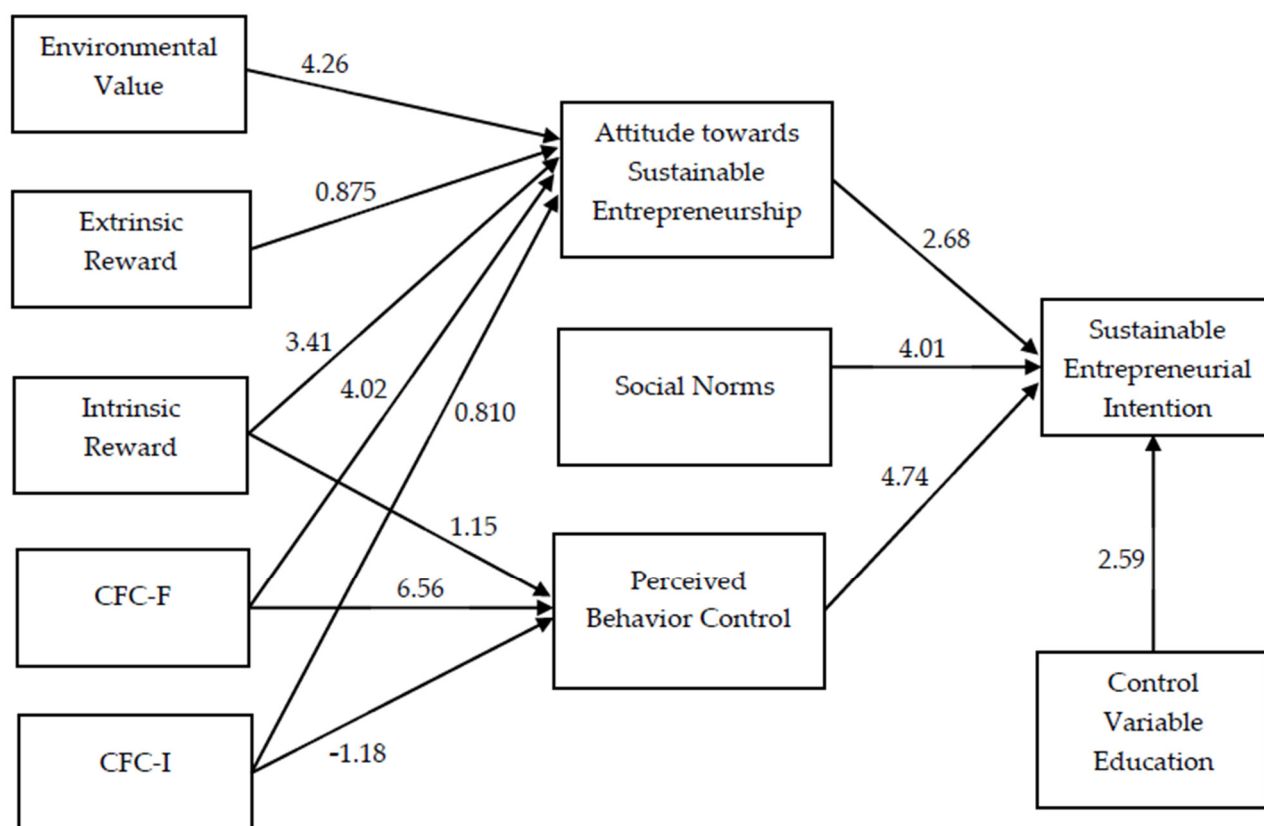


Figure 2. Result of structural modeling analysis.

Second, the results indicate a direct correlation between environmental values, intrinsic reward, CFC-F, and ATS and display that extrinsic praise and CFC-I do not have any significant association with ATS. The outcomes of this examination have proven that environmental values and one's perceptions of CFC-F are highly significant in influencing their attitude in the direction of sustainable entrepreneurship. These results are in accordance with Lyons et al. [61] and Patzelt and Shepherd [64], who provide an explanation for their perspective on environmental values and their goal to start a sustainable enterprise. Further, consequences show no significant correlation between extrinsic reward, CFC-I, and attitude toward sustainable entrepreneurship. In terms of correlation between intrinsic rewards, CFC-F, and attitudes towards sustainable entrepreneurship, the findings are somewhat consistent with the existing literature [28]. This intuitive method indicates that creativity and innovativeness are strongly correlated with environmental and economic growth; thus, environmental values, intrinsic rewards, and CFC-F have a significant impact on attitudes toward sustainability [72].

The third set of outcomes takes into account future outcomes and intrinsic rewards in determining the control role of perceived behavior. Path coefficients from CFC-F to perceived behavioral control were positive and significant, while CFC-I and intrinsic reward did not appear to be important in terms of perceived behavioral control. The pathway coefficient of intrinsic reward was positive but not significant, and the CFC-I coefficient for perceived behavior was negative and did not significantly affect sustainable intention. These findings are supported by Rabinovich's study [107]. The results for the control variable were as expected, showing that sustainable entrepreneurship education is a strong indicator of one's willingness to become a sustainable entrepreneur. The path coefficient (PC) is positive and important.

Results related to structural modeling analysis are found in Table 5 (Figure 2).

Table 5. Direct effect among the construct.

Path	Direct Effect	t-Value	Hypothesis	Significant
EE→SEI	0.098	2.59	Control variable	Yes
ATS→SEI	0.211	2.68	H1a	Yes
SN→SEI	0.189	4.01	H1b	Yes
PBC→SEI	0.25	4.74	H1c	Yes
ENV→ATS	0.382	4.26		YES
INTN→ATS	0.162	3.41		YES
EXTN→ATS	0.03	0.875		NO
CFC-F→ATS	0.210	4.02		YES
CFC-I→ATS	0.054	0.810		NO
INTN→PBC	0.072	1.15		NO
CFC-F→PBC	0.493	6.56		YES
CFC-I→PBC	−0.097	−1.18		NO

Note: Supported t value > 2.5 and p value < 0.01.

4.4. Path Analysis Mediation

The mediated effect of the given compound was tested with SEM-AMOS. The mediation testing procedure was proposed by Zhao and used to analyze the given hypothesis, which indicates the function of ATS and PBC as mediators between work value and future consequences and SEI [108]. For the test samples, we have taken 100 subsamples and performed bootstrapping analysis on them to obtain the complete and consistent result of the indirect effect (Table 6). In the present study, the type of mediation was determined using the criteria established by Zhao, Lynch, and Chen [108]. According to them, the types of mediation effects are five: non-effect and non-mediation, mediation of competition, indirect mediation comparison, complementary mediation, direct-only non-mediation. Baron and Kenney's [109] partial mediation and full mediation are similar to Zhao, Lynch, and Chen's [108]. While analyzing the impact of work value and considering future consequences for the SEI, we review the significance value of each direct path (see Table 5) and the role of each mediation variable. If both indirect and direct effects are significant, partial mediation is verified. When analyzing path analysis, mediation is associated with indirect effects on dependent variables between one or more mediating variables [9,110]. As the results show, ATS positively mediates the negative relationships between external rewards, CFC-I, and SEI, as well as the relationship between environmental values, internal rewards, and CFC futures. However, it is not possible to mediate extrinsic reward and the indirect negative link drawn between CFC-I and SEI. Hence, H2, H4, and H5 are accepted, and H3 and H6 are not because they have no significant relationship with the mediator. This shows that ATS will convert environmental norms, intrinsic praise, and CFC -F into SEI, and as a consequence, the higher the only motivation and choice for environmental price, intrinsic praise, and CFC-F, the greater the SEI will be. The final results indicate that the cost of the surroundings and CFC-F both have the highest indirect effect (0.120, 0.141) on SEI.

Likewise, the calculations show that PBC mediates the course between intrinsic reward and consideration for future consequences and SEI, and that CFC-F has an indirect positive impact on the latter. Finally, they show that the intrinsic reward and CFC-I do not meet the impact criteria proposed by Zhao, Lynch, and Chen [108]. This shows that the previous (independent) variable must have a meaningful relationship to the mediator. According to this criterion, when the upper and lower thresholds are positive and significant, then partial mediation is achieved. Consequently, H8 is generic, but H7 and H9 are not supported as intrinsic praise and CFC-I should follow the criteria. These findings are used in further discussion and are given in Table 6.

Table 6. Results of mediating analysis of proposed hypotheses.

Path	Coefficient	<i>p</i> Value	L.T	U.T	Hypothesis	Mediation Types	Results
Env→ATS→SEI	0.120	0.002	0.052	0.150	H2	Com. partial	Supported
INT→ATS→SEI	0.022	0.057	0.005	0.052	H3	Com. partial	Supported
EXT→ATS→SEI	0.031	0.146	0.010	0.071	H4	No mediation	Not supported
CFC-F→ATS→SEI	0.141	0.024	0.044	0.531	H5	Com. Partial	Supported
CFC-I→ATS→SEI	0.019	0.076	0.004	0.047	H6	No mediation	Not supported
INT→PBC→SEI	0.001	0.838	−0.009	0.016	H7	No effect	Not supported
CFC-F→PBC→SEI	0.036	0.005	0.014	0.063	H8	Com. partial	Supported
CFC-I→PBC→SEI	0.032	0.179	−0.016	0.085	H9	No mediation	Not supported

Note = LT= lower threshold, UT = upper threshold, Com. partial mediation = complementary partial mediation.

5. Discussion

This work provides many relevant theoretical and practical applications, describing the role of work values and the consideration of future consequences when incorporating the TPB as a determinant of SEI to develop sustainable entrepreneurship.

First, this research tests the given hypothesis for the dimensions of TPBs (H1a, H1b, and H1c) to contribute to the discussion on the relative importance of various factors (behavioral and social) in the selection-making technique for the development of sustainable entrepreneurs. Some researchers emphasized considering social factors, which include perceived help and approval inside non-public networks [30,111]. The findings of our observation emphasized the significance of elements at the individual level and checked the feasibility of aim formation. Current studies provide sturdy evidence for attitude perceived behavioral control and subjective norms. These results seem to suggest that, although the will to start a new venture depends on given consent within social networks [48], greater emphasis is being placed on actors [62]. This means that sustainable entrepreneurs can move beyond the traditional way of making enterprise and modify the general conventions for the role of entrepreneurship in society; therefore, social norms are necessary for the advancement of SEI. This search is consistent with the description of a sustainable entrepreneur as an individual questioning the status quo [112], and it seems to contradict actual sustainable entrepreneurship, wherein the assets and other aid supplied through social networks play a key function in the improvement of sustainable entrepreneurship [30].

Second, we analyze the ATS-mediated hypothesis (H2, H3, H4, H5, H6) to determine the relationship between (1) environmental value, (2) extrinsic reward, (3) intrinsic reward, and (4) CFC-F, (5) CFC-I, and (6) SEI. With regard to ATS' mediator role, the results support the hypothesis about environmental values and intrinsic reward as well as CFC-F. According to bootstrap analysis, ATS significantly mediates the relationship between environmental value and intrinsic reward, CFC-F, and SEI. Hence, extrinsic reward and CFC-I do not meet the mediation requirements as they have no significant relationship with ATS [113]; moreover, environmental values and CFC-F have a higher indirect impact on SEI. These findings are in accordance with Fayolle and co-workers [110], who have investigated the importance of work, strength, and objectives on SEI in Spain, as well as with the analysis of Koe et al., [47] who showed that, in Malaysia, intrinsic reward and ATS influence the completion of a sustainable task. Therefore, the current piece of work invites future researchers to consider whether a particular perspective or similar mechanism, such as empathy, plays a role [74,114], contributing to the development of environmentally friendly attitudes and, consequently, of SEI. This study found that considering onward results has a high-quality and significant impact on behaviors in sustainable entrepreneurship. According to the cognitive psychology literature, the authors hypothesize that strong-

mindful people who focus on sustainable entrepreneurship will find it easier to mitigate and cushion incentives and benefits, resulting in unsustainable behavior in the short term [115]. This is in accordance with the work of Patzelt and Shepherd [64] and Schlaegel et al., [42] on the link between environmental values and sustainable aims. From these results, it can be seen that besides high scores for environmental scores and intrinsic rewards, the CFC-F is closely related to a more positive attitude towards the implementation of SEI.

Third, we analyzed the hypotheses (H7, H8, and H9) through which PBC mediates the relationship between intrinsic reward, CFC-F and CFC-I, or SEI. These results only support the linkage of CFC-F and SEI, whereas intrinsic reward and CFC-I are not related to PBC and therefore do not meet the prerequisites of the mediation analysis proposed by Zhao and Lynch [108]. Bootstrap analysis shows the importance of the mediating effect of PBC, CFC-F, and SEI. Considering the function of CFC-F, this research is comprehensively supported by previous literature on sustainability intentions [8,114]. Nevertheless, PBC is the combined effect of self-efficacy and controllability on sustainable entrepreneurship, and encouraging an individual's future enterprise can be a beneficial way to promote positive PBC and action on sustainable entrepreneurship as well as values that should be incorporated in the behavioral research on the subject [8]. Therefore, the findings show that the higher the entrepreneurs' ambition with significant future consequences, the more sustainable their intention. Likewise, the previous literature has established that concern for future results is a decisive driver of sustainability [8]. Thus, the results of this work confirm the claim that CFC-F and PBC are the most important factors for explaining sustainable entrepreneurial intentions.

Finally, the results confirm these views and suggest that this process should be implemented before choosing a career path. We have shown that taking certain sustainable entrepreneurship courses has a beneficial impact on sustainable entrepreneur intentions; our results confirm those of previous studies, which have called for the inclusion of a sustainable entrepreneurship curriculum [46]. Technical knowledge and practical work is then critical to this field and may be the choice of many graduate programs [116]. Therefore, we recommend the value activation strategy introduced above. This can help educators acquire a more targeted approach toward students, with the aim to better develop future relationships between generations.

6. Conclusions

Despite the significant advances in entrepreneurship and the most important transition from old school ventures to fashionable ones, evidence on the ways in which purpose and attention to different norms as well as the consideration of future consequences manifests in all forms of commercial enterprise. To this end, this study examined the work value of university graduates and their consideration of future SEI consequences through challenging subjects that develop intention for sustainable entrepreneurship development. The results show insightful findings, along with several future opportunities that could promote sustainable entrepreneurship among favorable entrepreneurs. This research demonstrates the widespread and advantageous mediating consequences of attitudes toward sustainable entrepreneurship and of controlling them, providing essential pragmatic and political implications. These results suggest that the higher the intentions and consideration of future consequences for an individual's work value, the greater the advancement of the SEI will be. Hence, a feasible and reliable option for encouraging sustainable entrepreneurship and fostering sustainable freshers is to nurture talent and abilities.

6.1. Theoretical and Practical Implication

From a theoretical point of view, this study can provide a better understanding and emphasis on the applicability of TPB in the SEI model, which can also be extended to other sustainable social projects [7]. This study supplements the existing literature on entrepreneurship with important guidance on how to apply different business models in

your chosen context [8]. The sustainable entrepreneurship results of this study support the view that the TPB should be adopted when researching sustainable entrepreneurship.

Second, the results of this study show that the use of intention models depends on understanding the different business opportunities and adopting different business models. Further research explores the factors driving SEI by developing an understanding of adopting different models of intent as models for sustainable entrepreneurship and by expanding the range of sustainable opportunities and options among younger generations.

The practical results of research that have changed people's attitudes towards sustainable behavior have long been considered a task of government [115]. In our observation, we found that subjective norms directly impact one's decision to emerge as a sustainable entrepreneur. Therefore, the role of the government is to create awareness and promote the justification of sustainable entrepreneurship. If the majority of the people are aware of sustainable entrepreneurship, it may motivate others to promote it; this may be another way of raising social norms and encouraging sustainable entrepreneurship. Therefore, it is important to get the attention of politicians and promote the legitimacy of sustainable entrepreneurship through government packages.

6.2. Limitations and Future Research

This observation presents numerous limitations, which represent additional opportunities for future research. First, the hyperlinks proposed are contextual, namely sustainable values and future concerns for developing a sustainable entrepreneurship. To provide extra guidance on the proposed connections, further research must check their relationships with diverse entrepreneurial possibilities, which usually include social as well as environmental entrepreneurship.

Second, this study involves students getting entrepreneurial education. This will give a solid foundation for research involving people who have not had entrepreneurial education, people from different age groups, and existing entrepreneurs, enhancing the model that has already been proposed as well as providing a comparison between people from different groups.

Third, the current study presents the mediation relationships of two dimensions of TPB, namely work value and future consideration, but it does not conduct any mediation analysis with social norms for sustainable intention. Therefore, as the current study employs a cross-sectional design, future studies should investigate and make a complete analysis of the three paths of TPB with work values and future orientation for the formation of sustainable intention in a longitudinal way.

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Informed Consent Statement: Written informed consent was obtained from all participants to be included in the study.

Data Availability Statement: The quantitative data used to support the findings of this study are included within the article.

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