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RESEARCH PAPER

Mapping the Path to Sustainable Entrepreneurship: A Survey of Intentions among Public Sector University Students in Pakistan

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ABSTRACT

The business environment in today's world is going through a rapid change due to sustainability practices. Sustainable entrepreneurship plays a significant role in helping businesses achieve economic, social, and environmental goals. This study investigates the factors of sustainable entrepreneurial intentions among Pakistani public sector university students. The study has used a deductive approach by using questionnaire data of 394 students studying at two public universities—Mehran University of Engineering and Technology, Jamshoro and University of Sindh, Jamshoro—was gathered using convenience sampling. Data analysis carried out through Partial Least Square Structural Equation Modelling technique revealed that the environmental Values and entrepreneurship education positively influenced student's sustainable entrepreneurial intention through TPB model factors as mediators. The study brings new insight by extending the TPB model with the addition of two variables. The study's findings would support policymakers to devise policies for establishing platform for the young graduates to encourage them towards sustainable entrepreneurship. Moreover, universities are recommended to introduce sustainable entrepreneurship courses and establish incubation centers for the students to help them achieve economic as well as environmental goals. Future studies may be carried out using larger samples and using qualitative approach.

KEYWORDS Entrepreneurship Education, Environmental Values, Sustainable Entrepreneurship, TPB

Introduction

Sustainable entrepreneurship has witnessed the tremendous growth over the last ten years as a result of innovative business approaches aimed at addressing social, economic, and environmental challenges (Sher et al., 2020a). This trend has been fueled by a growing awareness of the impact of business on society and the environment, as well as the potential for entrepreneurship to drive positive change. As a result, sustainable entrepreneurship has begun to gain much important focus from policymakers, investors, and entrepreneurs alike. Sustainable entrepreneurs exploit unaddressed social and environmental issues to generate value (Hoogendoorn et al., 2019). By implementing financially viable and creative business models, enhancing socioecological education, and implementing initiatives for biodiversity protection, the business organization aims to shape consumers' value proposition. This approach, known as the triple bottom line, aims to create sustainable businesses that not only generate profit but also contribute positively to society and the environment. By adopting this approach, companies can attract socially conscious consumers and investors who prioritize ethical and sustainable practices. Nowadays, businesses are more inclined, rather required by the international institutions, to commit themselves to sustainability in the form of Sustainable operations, Sustainable manufacturing, Sustainable Entrepreneurship and sustainable Digital Entrepreneurship to name a few.

Recent researches have suggested that green technologies can help sustainable entrepreneurs overcome challenges (George et al., 2021). This transformation capacity of digitalization alters nature of entrepreneurship providing new opportunities for innovation, growth and global reach. Entrepreneurs can now leverage technology to create new business models, reach customers in new ways and operate more efficiently than ever before. The green entrepreneurship is a new insight to help address sustainability issues (Seele & Lock, 2017). Thus, a new field Sustainable Entrepreneurship emerges as a field responsible for creating eco-friendly businesses while contributing to society in the form of reduced wastage, creating employment, reduction of poverty etc. The youth specially the students are the ones who get the most out of green technology when it comes to starting businesses. Thus, this area of research is an interesting arena to be studied in which students' entrepreneurial intentions may be studied in the area of sustainable entrepreneurship.

Pakistan is a developing country seeking to meet and comply the the United Nations' Sustainable Development Goals (SDGs). Regarding the compliance of the Sustainable Development Goals, Pakistan stands at 125th out of 163 countries (*Sustainable Development Report 2022*) requiring a serious intervention to achieve the targets by 2030. To achieve this, sustainable entrepreneurship can play a crucial role in removing social inequalities, creating employment opportunities, uplifting the economy and preventing the damage to the natural environment and the planet (Muñoz & Cohen, 2018). Sustainable entrepreneurship seeks to benefit people, the economy, and society directly and indirectly while preserving the environment, human life support systems, and local communities (Shepherd & Patzelt, 2011).

In this connection, the youth in Pakistan can help the country achieve an economic recovery and implementation of SDGs. The students in higher education institutes have the potential, passion and knowledge to start businesses that help the country achieve sustainability goals. However, the research question is to what extent they do they have sustainable entrepreneurial intentions. Secondly, what factors determine and boost their such intentions. Rare literature exists on this research area particularly in the context of Pakistan. According to Sargani et al. (2020), the studies need to be conducted on sustainable entrepreneurship in transition economies that must require an analysis on large-scale so as to generalize the results. Therefore, the gap exists to study the factors that affect the sustainable entrepreneurial intentions among universities students in a developing country.

To gain a comprehensive understanding of sustainable entrepreneurial intentions, it is crucial to identify the variables that exert influence on them. The Ajzen's theory of planned behavior (Ajzen, 1991) has been applied for this purpose.. Further, the linkage of sustainability driven entrepreneurial intentions with TPB has also been analyzed in this study. Thus this study has these contributions; first, it adds a contributory work on "Sustainability Oriented Entrepreneurial Intentions-TPB" relationship which was rare in previous studies (e.g. Liñán & Chen, (2009)); second, this study adds two factors i.e. environmental values and entrepreneurship education as an experimental research approach to analyze their impact on Sustainable Entrepreneurial intentions

Literature Review

TPB and Sustainable Entrepreneurial intention

Entrepreneurship is a combination of creativity, innovation and risk-taking to create positive change in society and the economy. Intention is what is needed to give shape to the ideas of entrepreneurs and the TPB of Ajzen (1991) is a valid theoretical base for understanding intention (Krueger et al., 2000). The theory has been always believed to be the robust one in the field of social sciences to understand the human behaviour and to predict human psychology (Chen & Tung, 2010; Hameed et al., 2021). The TPB has determinants like Subjective norms, personal attitude, and perceived behavior control. The subjective norms have been found by many researchers to have a strong relationship with entrepreneurial intentions (Karimi et al., 2016). Likewise, it has been discovered in earlier

studies that the attitude has a favorable impact on entrepreneurial intentions. (Kumar & Das, 2019; Sargani et al., 2020). Similar to this, according to TPB theory, Perceived behavioral control refers to an individual's perception of their own task-related self-efficacy, representing their perceived ability to effectively perform a given task, which has been linked to entrepreneurial intention with positive outcomes (Wilson et al., 2007). Like in the studies of traditional entrepreneurship intentions, TPB has also been proven to be the prevalent basis for determining the sustainable entrepreneurial intention as is evident in the studies of Fatoki, (2020, Sargani et al. (2020), and Tiwari et al.(2017). The following paragraphs show how TPB model relates to SEI through attitudes, norms, and behavioral control.

Environmental Values

Eco capitalists is a term used by Sher et al. (2020) for entrepreneurs who strive to improve environmental quality and preserve space. These Environmentally oriented individuals are more likely to respond to entrepreneurial opportunities (Kuckertz & Wagner, 2010a). People who are deeply concerned about and care about the environment are more likely to express those values and take voluntary action (Bruyere & Rappe, 2007; Waris & Ahmed, 2020). Sargani et al. (2020) points out that businesses that are environmentally conscious care about the environment and find sustainable ideas to gain competitive edge.

H1: Environmental Values are positively related to Attitude towards Sustainable entrepreneurship.

H2: Environmental Values are positively related to Perceived behavioral control.

Entrepreneurship Education

Entrepreneurship education and entrepreneurship experiences at universities help instill entrepreneurship behavior among students (Hameed & Haq, 2021). Studies conducted by Bae et al. (2014) and Rauth Bhardwaj, (2014) indicate that university education positively influences entrepreneurial activity. Duval-Couetil (2013) found that universities provide opportunities to interact with entrepreneurs and develop business skills. Additionally, student attitudes are influenced by university support for entrepreneurship, which inspires them to engage in sustainability-oriented entrepreneurship.

H3: Entrepreneurship education is positively related to Attitude towards Sustainable entrepreneurship.

H4: Entrepreneurship education is positively related to Perceived behavioral control.

Attitude towards Sustainable Entrepreneurship

Attitudes are the extent to which a person values a given behavior (Ajzen, 1991). According to Krueger et al. (2000), attitudes shape future intentions of becoming an entrepreneur. Entrepreneurial intention increases with increased attitude towards entrepreneurship. Moreover, Attitudes are a key predictor of entrepreneurial intentions as demonstrated by the analysis done by (Lortie & Castogiovanni, 2015).

The attitudes of university students towards sustainability-focused entrepreneurship, according to earlier studies, exhibit a positive impact on intentions to pursue sustainability (Agu, 2021; Thelken & de Jong, 2020; Zhen et al., 2021). This entails that Sustainable entrepreneurship is driven by positive attitudes towards social and environmental goals.

H5: Attitude towards sustainable entrepreneurship is positively related to sustainable entrepreneurial intention

Perceived Behavior Control

Perceived Behavior Control reflects past experiences or impediments (Ajzen, 1991). Perceived behavioral control is essential for successful entrepreneurship, providing a sense of control over firm-creation behaviors. Researchers Munir et al. (2019) and Ng et al., (2021) discovered that the self-efficacy has a favorable impact on entrepreneurial intentions. Moreover, Perceived behavioral control is a key factor in understanding SOEI, as it is a dimension of TPB (Fatoki, 2020; Thelken & de Jong, 2020). In a few studies, though, efficacy is not found to positively influence the SOEI (Vuorio et al., 2018).

H6: Perceived behavioral control is positively related to sustainable entrepreneurial intention.

Subjective Norms

Social pressure to behave in a certain way or refrain from doing something creates subjective norms., claims (Ajzen, 1991). Subjective norms are used in the context of entrepreneurship to describe how a person's propensity for entrepreneurship is induced by the opinions of their family and friends (Kautonen et al., 2015). The previous studies show that subjective norms dimension of entrepreneurial intentions is less consistent (Lortie & Castogiovanni, 2015; Munir, Jianfeng, Miao, et al., 2019). In the studies related to SEI, subjective norms are found to be the influential factor (Agu, 2021; Vuorio et al., 2018), while studies conducted in developing and underdeveloped countries, it is found to have weak relationships with SEI (Fatoki, 2020; Thelken & de Jong, 2020)

H7: Subjective norms positively affect sustainable entrepreneurial intention

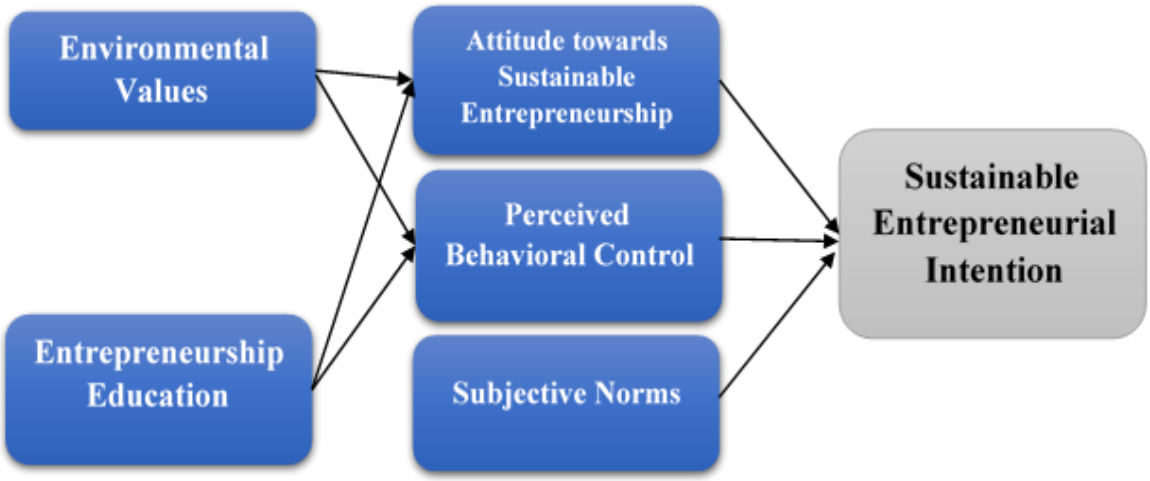

Figure 1 Research Framework

Material and Methods

Data, Population, and Sample

Using a convenience sampling, the data was collected using survey design from university students. The target population is Pakistani students. According to UNDP reports, the major chunk of population is youth in Pakistan. If educated and trained properly in terms of e-commerce, e-business, other self-sustaining sources of earning, these youth can build a better Pakistan and also help attaining sustainable development goals The determination of the sample size for this study followed the recommended methods proposed by (Hair et al., 2012). According to Hair et al., 2014) the number of responses may be set in the range of 5 to 10 per measurement item of variables used in study. To increase reliability and get better results, this study distributed 400 questionnaires among students in University of Sindh,

Jamshoro and Mehran University of Engineering and Technology but only 394 responses could be collected. The data was collected through google form as well as through pen and paper questionnaire. A major percentage of responses were collected online with the help of Google Forms.

Data Measurement

The measurement items of this study have been adapted from past studies. The questionnaire comprises of six variables; one dependent variable, three independent variables and two mediating variables. The questionnaire consists of sociodemographic questions of respondents followed by the questions of each group in the form of variable. A 5-point Likert scale was used to grade the responses. On the Likert scale, 1 was set as a value for "Strongly Disagree" and 5 "strongly agree". The sources of each construct in this study are displayed in Table 1:

Table 1
Constructs and items

Variables	Authors
Sustainable entrepreneurial intention	(Vuorio et al., 2018)
Attitude toward sustainable entrepreneurship	(Xu & Yu, 2008)
Perceived behavioral Control	(Shahab et al., 2019)
Subjective Norms	(Liñán & Chen, 2009)
Entrepreneurship Education	(Luan NGUYEN et al., 2022)
Environmental Values	(Kilbourne & Pickett, 2008)

This research study adopts a cross-sectional design with a quantitative approach. Utilizing PLS-SEM with SMART PLS 4, the data was analyzed, and the hypotheses tested. Partial Least Squares Structural Equation Modeling (PLS-SEM) is a powerful tool for analyzing data and evaluating variables in structural models. The success of SEM is largely attributable to its ability to evaluate latent variable measurement while also looking at the relationships among latent variables (Babin et al., 2008). The PLS method, according to Henseler et al. (2009), switches between principal component and canonical correlational analyses. The data in this study were analyzed using a two-step PLS-SEM methodology. The initial step involves employing the Measurement Model (outer model) which is used to assess various tests such as item reliability, convergent validity, and discriminant validity. Subsequently, the second step involves testing various hypotheses using an internal model known as a structural model. (Schuberth et al., 2023).

Results and Discussion

The results are broken down into two sections; the first section gives a summary of the respondents' demographic information, and the second section shows how the measurement model's findings were applied. Subsequently, the study presents the results of the structural model, which were employed to test the formulated hypotheses.

The demographics are presented in Table 2. Out of the total active participant, male respondents were 305 (77.4%) and female were 89(22.6%). As per the age group, most of the respondents were young aged between 20 to 30 years constituting 364(92.4%) of the total respondents.

Table 2
Profile of Respondents

Demographic Variable	Categories	Frequency	Percentage
Gender	Male	305	77.4
	Female	89	22.6
Age Group	Below 20 years	18	4.6
	Between 20 and 30	364	92.4
	Between 31 and 40	8	2.0

	Between 41 and 50	2	0.5
	More than 51 years	2	0.5
Marital Status	Single	357	90.6
	Married	34	8.6
	Divorced	2	0.5
	Widow	1	0.3
Name of University	University of Sindh, Jamshoro	313	79.4
	Mehran University of Engineering and Technology, Jamshoro	81	20.6
Highest Education	Bachelors	292	74.1
	Masters/MPhil	97	24.6
	Doctorate	4	1.0
	Other	1	0.3

Measurement Model Assessment

The data for the model was analyzed using PLS-SEM (Partial Least Squares Structural Equation Modeling), which is an advanced robust statistical technique. PLS-SEM is a multivariate data analysis method used to test causal models. Hair et al. (2014) recommended using a two-step analysis process, starting with a measurement model analysis to confirm the data's reliability and validity. In the second step, the structural model is examined to verify the hypotheses put forth.

Factor loadings, composite reliability, alpha, and average extracted variance are all evaluated for a measurement model (Thiele et al., 2016). Further, it indicates the accuracy of each item's reflection of the contribution to a certain element. All the metrics were calculated and presented in Table 3. First, every item in the model has factor loadings that are more than the threshold acceptable value of 0.50 (Hair et al., 2016). Despite the fact that the factor loading > 0.70 is preferred (Vinzi et al., 2010), researchers commonly find lesser outer loadings (< 0.70) in studies of social sciences. The consequences of the item's removal on composite reliability, content, and convergent validity must be studied rather than automatically removing indications. Similarly, most values of Composite reliability were above suggested value of 0.70 and for AVE almost all values were above 0.50. Convergent validity is supported when each item has composite reliability over 0.70 and when the average variance extracted (AVE) for each construct is 0.50 or above (Hair et al., 2014; Weston & Gore, 2006).

In order to assess the discriminant validity, a much modern standard called Heterotrait-Monotrait (HTMT) was adopted. A construct's discriminant validity measures how much it actually varies from other constructs or, alternatively, how much it measures what a construct is meant to measure (Hair et al., 2014). The HTMT ratio is used to establish discriminant validity. The discriminant validity can also be measured by using Fornell and Larker Criterion, the approach, however, does not provide a true picture of lack of discriminant validity (Henseler et al., 2015). However, the HTMT threshold has been disputed in the literature to date; Teo et al. (2008) indicated a liberal threshold of 0.90 or less, whereas Kline (2012) suggested a threshold of 0.85 or less." Since the HTMT ratio used to measure the data for this research is far lower than the necessary threshold of 0.90, as indicated in Table 4 below so the discriminant validity cannot be challenged.

Using coefficient of determination $R^{2,}$ predictive relevance was also evaluated of the model. The value of R2 is divided into three categories: high, moderate and low, with high values greater than 0.6, moderate between 0.3 and 0.6 and low below 0.3. The R^2 has been found to be 0.415 which show that the model has considerable predictive power.

Table 3
Convergent Validity

Construct	Items	Loadings	Alpha	CR	AVE
Attitude towards Sustainable Entrepreneurship	ATSE1	0.715	0.868	0.902	0.656
	ATSE2	0.817			
	ATSE3	0.841			
	ATSE4	0.776			
	ATSE5	0.891			
Perceived Behavioral Control	PBC1	0.802	0.905	0.925	0.725
	PBC2	0.866			
	PBC3	0.827			
	PBC4	0.907			
	PBC5	0.852			
Subjective Norms	SN1	0.76	0.878	0.901	0.665
	SN2	0.846			
	SN3	0.821			
	SN4	0.822			
	SN5	0.825			
Entrepreneurial Education	EE_1	0.823	0.859	0.863	0.639
	EE_2	0.805			
	EE_3	0.802			
	EE_4	0.742			
	EE_5	0.82			
Environmental Values	EV1	0.855	0.924	0.930	0.725
	EV2	0.896			
	EV3	0.868			
	EV4	0.726			
	EV5	0.88			
	EV6	0.874			
Sustainable Entrepreneurial Intention	SEI1	0.693	0.877	0.886	0.673
	SEI2	0.833			
	SEI3	0.869			
	SEI4	0.838			
	SEI5	0.856			

CR=Composite Reliability, AVE=Average Variance Extracted

Table 4
Discriminant Validity (HTMT Ratio)

	ATSE	EC	EEE	ESE	SN	SOEI
ATSE						
EC	0.700					
EEE	0.663	0.667				
ESE	0.616	0.526	0.485			
SN	0.479	0.485	0.322	0.442		
SOEI	0.640	0.588	0.584	0.576	0.420	

Structural Model Assessment and Hypotheses testing

The subsequent stage of PLS-SEM analysis is the assessment of the Inner Model (Structural Model). This stage is crucial as it enables the testing of hypotheses. The significance of the model is determined through careful analysis of the path coefficient, standard errors, and t-value. By employing a bootstrapping process in Smart PLS, the acceptance or rejection of hypotheses is determined based on the path coefficient values. Figure 2 shows the measurement of path coefficient (β) in the structural model. The results presented in Table 5 demonstrate that significant relationship exists among variables. Seven hypotheses were tested based on SEI. Hypothesis 1 proposing the positive influence of environmental values on attitude towards sustainable entrepreneurship (ATSE) was supported (β= 0.441, t=7.952). Hypothesis 2 proposing the positive influence of environmental values on Perceived Behavioral Control was supported (β= 0.374, t=6.766). Hypothesis 3 proposing the positive influence of Entrepreneurship Education (EE) on attitude towards sustainable entrepreneurship (ATSE) was also supported (β= 0.321, t=6.077). Hypothesis 4 proposing the positive influence of Entrepreneurship Education (EE) on Perceived Behavioral Control was also supported (β= 0.213, t=3.568). Hypothesis 5 proposing the positive influence of attitude towards sustainable entrepreneurship on Sustainable entrepreneurial intention (SEI) was also supported (β= 0.269, t=5.499). Hypothesis 6 proposing the positive influence of Perceived behavioral control on Sustainable entrepreneurial intention (SEI) was also supported (β= 0.269, t=5.499). Hypothesis 7 proposing the positive influence of Subjective Norms (SN) on Sustainable entrepreneurial intention (SEI) was also supported (β= 0.114, t=2.318).

Figure 2 Structural Model Assessment

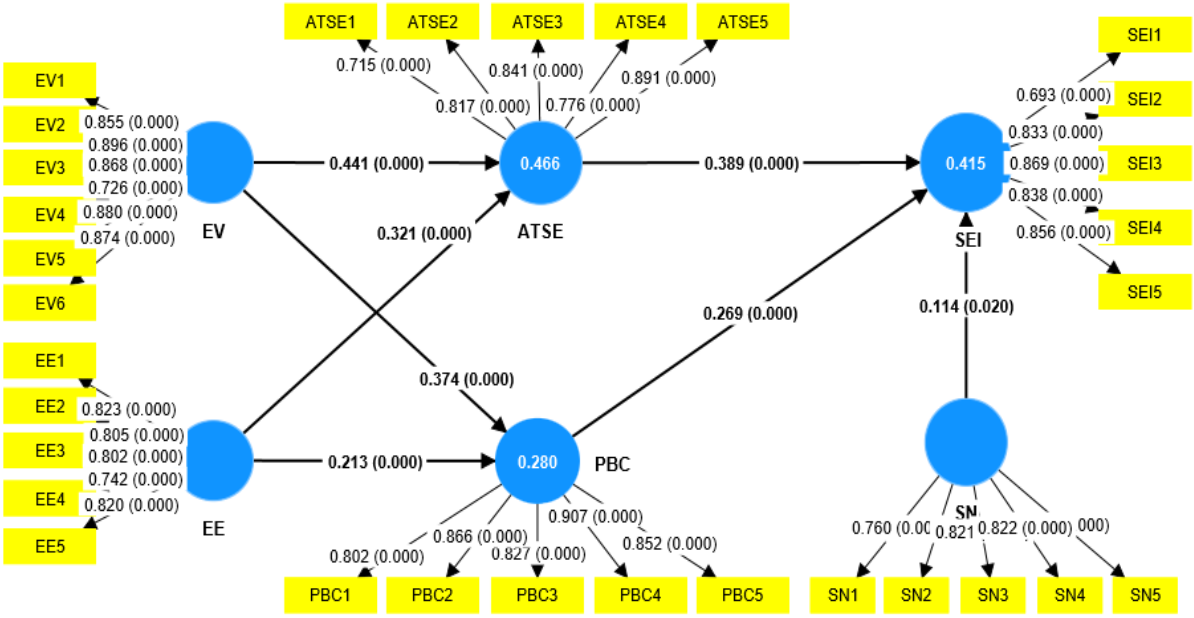

Figure 3 Structural Model Assessment

Table 5
Path Analysis

Hypotheses	Relationship	Beta	SE	t values	P values	Decision
H1	EV -> ATSE	0.441	0.056	7.925	0.00	Supported
H2	EV -> PBC	0.374	0.055	6.766	0.00	Supported
H3	EE -> ATSE	0.321	0.053	6.077	0.00	Supported
H4	EE -> PBC	0.213	0.06	3.568	0.00	Supported
H5	ATSE -> SEI	0.389	0.053	7.345	0.00	Supported
H6	PBC -> SEI	0.269	0.049	5.499	0.00	Supported
H7	SN -> SEI	0.114	0.049	2.318	0.02	Supported

Path coefficients (beta); significant at p< 0.05

DISCUSSION

This section discusses the findings of the study mainly the interpretations of the findings in the light of theory and literature. Moreover, we discuss the impact of variables on sustainable entrepreneurial intentions with reasons. Moreover, later in this section, we discuss the implications, limitations and future study directions.

The main aim of this study is to investigate the factors that influence the sustainable entrepreneurial intentions among higher education institutions in Pakistan. Congruently, the objectives of the study were set. The theoretical foundation in the light of Theory of Planned behavior was discussed. The review of literature was also conducted in order to explain the relationship among the variables. On the basis of the literature, the hypotheses were formulated. Moreover, the objective of testing the model was also framed.

The research model of the study consisted of two antecedents i.e. environmental values and entrepreneurship education, three variables from Theory of Planned behavior and a dependent variable 'Sustainable entrepreneurial intention'. The literature review revealed how these variables were interrelated to each other. The theory of planned behavior made the strong base of this study. The theory of planned behavior was proposed by Ajzen, (1991). This theory proposed three main factors of intention i.e. Attitude, Perceived behavioral control and Subjective norms. Two of these factors were used as mediating variables in this study. The overall model was tested using PLS-SEM and the results were extracted

Firstly, results indicated that the environmental values exerted a strong influence on attitude towards sustainable entrepreneurship which support Hypothesis 1. This finding is consistent with the Lyons et al. (2010). Entrepreneurs who care about the environment intend to work with the people-profit-planet goal when doing business. Entrepreneurs dedicate their time and money in business and the risk of loss is inherent in business. However, the entrepreneurs take into account the environmental values as their core values to give benefit to the society, environment and to the business itself.

Secondly, The studies by Sargani et al. (2020) and Sher et al. (2020b) also endorse that the environmental values have great influence on the Perceived behavioral control of students towards sustainable entrepreneurship which support Hypothesis 2. Perceived behavior control is a factor that boosts confidence among the entrepreneurs that persuade the entrepreneurs to take into account the environmental values in their startups and operations of business.

Thirdly, the results indicate that Entrepreneurship education positively influences attitude towards sustainable entrepreneurship among students which support Hypothesis 3. The finding is consistent with the past studies by Bellò et al. (2018), Saeed et al. (2015) and Bergmann et al. (2016). The university support in this regard is crucial for young entrepreneurs. The students with strong sustainable entrepreneurial knowledge and experiences tend to develop strong attitude and intentions towards sustainable entrepreneurship. Universities offering a sustainable entrepreneurial course to students create sustainable entrepreneurs. The association between the sustainable curricula and the students intention towards sustainable entrepreneurship has been found to be strong (Kuckertz & Wagner, 2010b).

Fourthly, the results indicate that Entrepreneurship education positively influences Perceived Behavioral Control among students which support Hypothesis 4. The finding is consistent with the past studies by Bellò et al. (2018), Saeed et al. (2015) and Bergmann et al. (2016). Strong foundation in sustainable entrepreneurship education creates perceived behavioral control among students towards sustainability practices in their business startup career.

Fifthly, results indicate a significant effect of attitude towards sustainable entrepreneurship on Sustainable entrepreneurship intention. This implies that Eco values create positive attitude among students for sustainable entrepreneurial intention, which supports hypothesis 5. This finding is consistent with studies by Farrukh et al. (2018) who found that attitude positively influences traditional entrepreneurial intention among students. Additionally, Koe et al. (2014) and Vuorio et al. (2018) found that the attitude positively influences the SEI among students.

Sixthly, the findings reveal a significant effect of Perceived behavioral control on sustainable entrepreneurial intention, thus hypothesis 6 is also supported. Entrepreneurs who have strong perceived behavioral control confidently pursue their business goals that are aligned with the environmental values. Perceived behavioral control is conceptually resembled to self-efficacy since both terms refer to the extent to which a person believes that they can carry out a specific behavior (Abina IW; Onikosi-Alliyu, Saidat Oluwatoyin, 2015).

Seventhly, the hypothesis 7 is also supported as per the results in Table 5 which reveals that impact of Subjective Norms on SEI of students is positive and significant. This is because the students' entrepreneurial intentions are shaped by the parents, friends and relatives. This finding is consistent with the prior studies by Arru (2020) and Ham et al. (2015).

Theoretical and practical implications

This study contributes valuable insights to the existing body of knowledge by giving insights about the extension of TPB model with the addition of Entrepreneurship education and environmental values to influence sustainable entrepreneurship intention of students. The theoretical and practical ramifications of this study relate to university students' intentions for sustainability-driven entrepreneurship.

The TPB model has been modified into a new model and tested model in the context of higher education institutions of Pakistan. The model includes two factors of the TPB theory namely Attitude and Perceived behavioral control as mediating variables.

Additionally, the environmental values have been taken into account as an antecedent of sustainable entrepreneurial intention. The environmental values motivate the young entrepreneurs to promote eco-friendly practices in their business operations. Moreover, the linkage of environmental values with the TPB factors is another contribution of the study.

The practical implication of the study include highlighting the significance of sustainable practices in the business in order to create value in terms of "people-profit-planet". Additionally, the universities need to revise their entrepreneurship curriculum to include the sustainable elements in order to create sustainable entrepreneurs.

Limitations and future directions

Every research project will inevitably have its limitations. The results and their interpretation may be impacted by these restrictions. It is necessary to acknowledge the restrictions or conditions. Although this study's research goals were met, there are still some shortcomings or restrictions. Since this research was conducted through primary data by using questionnaire, the researchers should collect data by using one-on-one interviews and focusing groups.

Since this study employed convenience sampling, it is advised that alternate sample approaches be used in future studies to avoid skewing the results. The use of samples from various firms and organizations helps assure generalizability. Future study might be conducted by employing different variable items, different research instruments or another variable scale.

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