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Article

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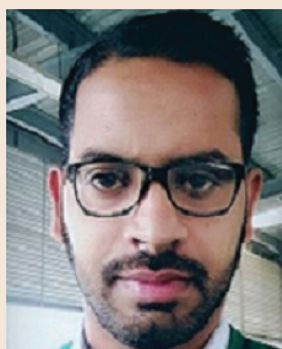
Factors affecting entrepreneurial intention for sustainable tourism among the students of higher education institutions

Danish Mehraj¹, Muhammad Idrees Ul Islam¹, Ishtiaq Hussain Qureshi², Shakeel Basheer³, Mubashir Majid Baba⁴, Viqar u Nissa¹ and Mohd Asif Shah^{5,6,7,8*}

Abstract: Entrepreneurs have an essential role to play in bringing positive change and growth to the world's economy. Entrepreneurship is a necessary aspect of economic growth because of its contribution to people's welfare through employment opportunities. Likewise, institutions of higher learning offer compulsory entrepreneurship courses for students with the support of government policies to encourage students towards entrepreneurship. Therefore, this study aimed to determine the factors influencing the students' intentions to become green entrepreneurs. The study uses the extended theory of planned behaviour model (TPB) and entrepreneurial education to develop a theoretical framework. The model has been examined on 350 tourism university students using structural equation modelling. The key findings indicate that Ajzen's TPB theory of planned behaviour and entrepreneurial education can be extensively expanded to determine sustainable entrepreneurial intentions in developing economies such as India. Attitude, subjective norms, perceived behavioural control, and entrepreneurial education are antecedents of entrepreneurial intent. Our results have valuable implications for aspiring entrepreneurs, policymakers, and scholars.

Subjects: Educational Psychology; Hospitality; Tourism

Keywords: theory of planned behaviour; sustainable entrepreneurship; entrepreneurial Intentions; attitude; subjective norm; perceived behavioural control; entrepreneurial education



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Danish Mehraj is an Assistant Professor in the Department of Management Studies at the University of Kashmir. With a Ph.D. degree, his area of specialization is Marketing. His research interests encompass various fields including sustainability, green marketing, entrepreneurship, e-commerce, consumer behavior, and tourism marketing. He actively contributes to the academic community through his research and expertise in these areas. He possesses strong technical skills in data analysis software such as SPSS, AMOS, and MS Excel, which enable him to conduct in-depth quantitative research and effectively analyze data. In addition to his research endeavors, he also takes on teaching responsibilities. He imparts knowledge in subjects such as Marketing Management, Business Statistics, Business Research Methods, Tourism Management, and Production and Operation Management. His aim is to foster an engaging learning environment that equips students with the essential skills and knowledge needed for their success.

1. Introduction

Sustainable entrepreneurship is an important notion that can successfully tackle environmental deterioration. Sustainable entrepreneurship is the process of recognizing and developing “unrealized” environmental products and services (Le Loarne-Lemaire et al., 2022). Sustainable entrepreneurship aids in the conservation of natural resources, the resolution of environmental issues (Yin et al., 2022), and the creation of new jobs, all of which aid in the promotion of long-term social and economic growth (Golsefid-Alavi et al., 2021). Soliman (2011) believes that sustainable entrepreneurship education can help students of higher learning institutions learn about and practice green tourism entrepreneurship. Similarly, the sustainable entrepreneurial intentions of students at higher learning institutions are influenced by many factors (Ahmad et al., 2019; Phuc et al., 2020). Schumpeter’s innovation theory states that innovation is a new combination of products, production methods, markets, and materials, in which creativity is the core content of the innovative activity and the key factor of green entrepreneurial intention (Phuc et al., 2020; Rahmani et al., 2018).

As green tourism entrepreneurship involves the identification of entrepreneurial opportunities and sustainable development aligned with the environment, it is necessary to develop further green technology and green entrepreneurial thinking (Yin et al., 2022). Thus, entrepreneurs may have to face more challenges in the process of green tourism entrepreneurship. Future self-continuity is also an important factor that affects entrepreneurial choice. Individuals with higher future self-continuity can accept more uncertainty during the entrepreneurial process (Zeng & Ouyang, 2020). Additionally, individual sustainable development values and entrepreneurship education for sustainable development are the most important factors that influence the green entrepreneurial intention among the students of institutions of higher learning (Ebrahimi & Mirbargkar, 2017). According to Zeng and Ouyang’s (2020) research, people can better deal with uncertainty during the entrepreneurial process when they have a higher sense of future self-continuity. This means that those with a clear vision of their future are more likely to persist through challenges and setbacks, which is crucial for success in entrepreneurship. Furthermore, Ebrahimi and Mirbargkar (2017) found that sustainable development values and entrepreneurship education play a significant role in shaping green entrepreneurial intentions among students in higher education institutions. By promoting sustainable values and providing education on sustainable entrepreneurship, universities can encourage students to pursue environmentally-friendly business ventures.

This highlights the importance of integrating sustainability into entrepreneurship education. Overall, these studies emphasize the need for individuals to have a clear sense of their future selves and for educational institutions to prioritize sustainable development values in entrepreneurship education. The positive, sustainable development values of individuals and the sustainable development entrepreneurship education programs set up by colleges may encourage students of institutions of higher learning to adopt green tourism entrepreneurship (Tien et al., 2020). In addition, diversified financial support, such as low-interest loans and campus entrepreneurship funds, can further promote green tourism entrepreneurship among them (Lotfi et al., 2018; Soomro et al., 2020). External environmental support (Kazakova & Kim, 2020; Park et al., 2018), personality (Kiatkawsin & Han, 2017; Zhang et al., 2014), self-efficacy (Galindo-Martín et al., 2020), and entrepreneurial enthusiasm (Tesprasit & Aksharanandana, 2020) have a significant impact on students’ green entrepreneurial intentions at institutions of higher learning. The research conducted by Soomro et al. (2020) highlights the importance of external environmental support, personality, self-efficacy, and entrepreneurial enthusiasm in shaping students’ green entrepreneurial intentions at institutions of higher learning. Likewise, Kazakova and Kim (2020) emphasize the role of external environmental support in promoting green tourism entrepreneurship among students.

Similarly, Park et al. (2018) also suggest that external environmental support positively influences students’ green entrepreneurial intentions. Again, Kiatkawsin and Han (2017) argue that

personality traits such as openness to experience and conscientiousness are positively related to green entrepreneurial intentions among students. Also, Zhang et al. (2014) further support this claim by highlighting the importance of personality traits such as a proactive personality in fostering green tourism entrepreneurship among students. Consequently, Galindo-Martín et al. (2020) suggest that self-efficacy plays a crucial role in shaping students' green entrepreneurial intentions, while Tesprasit and Aksharanandana (2020) emphasize the importance of entrepreneurial enthusiasm

The existing literature that explores green tourism entrepreneurship among students of higher education institutions is based on internal factors (e.g., personality and individual characteristics of entrepreneurs) or external factors (e.g., entrepreneurial environment, policy support, entrepreneurship education) (Lemaire et al., 2022; Ogunlela, 2018; Yi, 2021). With regard to studies into the relationship between tourism enterprise and university education (Mathushan & Pushpanathan, 2020; Silajdžić et al., 2015), the function of the university in the development of entrepreneurship has attracted much attention. The notion of entrepreneurial activity has been added to and later developed by including the development of entrepreneurship and understanding of tourism business creation among the students of higher learning institutions (Fragoso et al., 2020). Students of higher education institutions are currently thought to be one of the groups most likely to start a business (Ramayah et al., 2019). In this regard, several studies on the entrepreneurial propensities of university students have been conducted in recent years. However, such studies have primarily focused on students pursuing degrees in economics, business administration, and engineering, ignoring the growing importance of other university degrees as catalysts for the development of entrepreneurial projects among students (Liang et al., 2019; Nuringsih & Puspitowati, 2017; Rahman et al., 2019). In recent years, there has been a growing interest in studying the role of university degrees in fostering entrepreneurship among students. While previous studies have primarily focused on students pursuing degrees in economics, business administration, and engineering, expanding this research to include other fields of study is necessary. The development of entrepreneurial projects is not limited to these areas alone. Degrees in liberal arts, social sciences, and humanities can also provide students with valuable skills and knowledge that can be applied to entrepreneurship. Moreover, universities should consider offering more interdisciplinary programs that combine different areas of study to create a more holistic approach to entrepreneurship education. By doing so, universities can better equip their students with the tools they need to succeed as entrepreneurs regardless of their field of study.

On the other hand, our research aims to examine the growing importance of tourism entrepreneurship among university students with a background in tourism degrees. Because tourism is the third largest economic activity in the world (after oil and automobiles), and it is one of the fastest-growing activities (Petersen et al., 2021). The World Tourism Organization projects that by the year 2023, international tourist arrivals will have increased to 1.018 billion and a direct receipt is expected to reach US\$1.55 trillion (Galindo-Martín et al., 2020). Receipts from tourism make an important contribution to the economies of developing countries in terms of income (Liang et al., 2019). In terms of the tourist industry, it is that sector of the industry as well as government agencies that respond to the demands of tourists in such locations. It also encompasses the social, cultural, economic, and physical effects of the tourism industry and public sector organizations on host rural communities and their ecosystems (Waris et al., 2021).

Furthermore, numerous academicians promote entrepreneurship as a source of economic progress and national development (Banerjee, 2019; Westhead & Solesvik, 2016). Several studies have looked into various aspects of entrepreneurship, including motivational factors, educational components, psychological factors, and behavioural traits (Baumol, 1996; Kuratko, 2005; Wang & Wong, 2004). The importance of entrepreneurship in driving economic progress and national development cannot be overstated. Entrepreneurs play a crucial role in fostering innovation, wealth creation, and the creation of jobs, as Banerjee (2019) and Westhead and Solesvik (2016) have highlighted. Several studies have explored various aspects of this phenomenon to understand

the factors that drive entrepreneurship. Baumol (1996) examined the role of motivation in entrepreneurial behaviour, while Kuratko (2005) focused on the educational components that contribute to entrepreneurial success.

Similarly, Wang and Wong (2004) explored psychological factors such as risk-taking propensity and self-efficacy, which are important predictors of entrepreneurial behaviour. Collectively, these studies provide valuable insights into the factors that influence entrepreneurship and can inform policies to promote this critical driver of economic growth. By fostering a supportive environment for entrepreneurs and providing them with the necessary resources and Training, governments can create an ecosystem that encourages innovation, job creation, and economic progress.

Previous research has also focused on the personal characteristics of entrepreneurs, the incentives that motivate them to start a business, the challenges that hamper their attempts to establish a business successfully, and the demographic factors that influence their decision to engage in entrepreneurial activity (Baumol, 1996; Kuratko, 2005; Wang & Wong, 2004). Furthermore, various external variables significantly impact a person's decision to start a new business (Gnyawali & Fogel, 1994; Parameshwar, 2020). According to another study, people who engage in the entrepreneurial practice are more creative and technologically savvy, which has a direct impact on their personal behaviors and, eventually, their willingness to pursue entrepreneurship (Athayde, 2009; Geldhof et al., 2014; Gour & Singh, 2019). Thus, this study attempts to identify the role of entrepreneurial education, attitude, social norms, and perceived behavioural control, ultimately influencing an individual when starting a new business. The study is motivated by entrepreneurship being seen as a realistic alternative for tourism university students seeking to avoid unemployment. The majority of studies have focused on entrepreneurial intention in Western countries, with less attention paid to Asian countries such as India, despite evidence of disparities in entrepreneurial intention between regions and countries (Boubker et al., 2020; Hamilton, 2000; Kautonen et al., 2013; Krueger & Carsrud, 1993). Based on the above mentioned research, this study aims to address these research gaps in the conceptualization of entrepreneurial education, attitude, social norms, perceived behavioural control, and entrepreneurial intention. Thus, within the developed research model, the study addresses the following questions:

RQ1. What is the influence of attitude, social norms, perceived behavioural control, and entrepreneurial education on sustainable tourism entrepreneurial intention among the students of higher learning institutions?

The study highlights the need for educational institutions to provide more opportunities for students to learn about entrepreneurship and sustainability. Additionally, it is essential to create an environment that fosters positive attitudes towards entrepreneurship and encourages students to take control of their entrepreneurial journey. Overall, the study provides valuable insights into how different factors influence sustainable tourism entrepreneurial intention among students of higher learning institutions and offers recommendations for policymakers and educators to support sustainable entrepreneurship development. The present study discusses the development of the theory and the hypothesis before describing the methods used and moving on to the results, discussion, implications, and limitations.

2. Theoretical background

Unlike traditional profit-based entrepreneurship, sustainable entrepreneurship is gaining popularity (Hussain et al., 2021). This is because it creates a company that balances the triple bottom line's economic, social, and environmental aspects (Rahman et al., 2019). Thus, students act as agents of change to become sustainable entrepreneurs (Petersen et al., 2021; Ramayah et al., 2019). As a result, it's essential to research the factors influencing students' choices to become environmentally conscious tourism entrepreneurs. Only a few studies have looked into the intentions of becoming a sustainable green tourism entrepreneur (Alvarez-Risco et al., 2021) and a green

tourism entrepreneur (Elsawalhy & Elzek, 2023; Ruiz-Palomino & Martínez-Cañas, 2021). However, only some studies are available to study the factors that affect sustainable tourism entrepreneurial intentions among university students. This research provided a comprehensive model for determining the characteristics that motivate university students to become environmentally conscious tourism entrepreneurs. Furthermore, the theory of planned behaviour (TPB) (Ajzen, 1991) and entrepreneurial education (Farhangmehr et al., 2016) was utilized to investigate the elements influencing sustainable tourism entrepreneurial intention.

2.1. Theory of planned behaviour

Intentions are the most critical indicator of human behaviour (Krueger, 2008). According to the theory of planned behaviour, intentions are governed by attitude toward the act, subjective norms, and perceived behavioural control (Ajzen, 1991). Likewise, Behavioural intention, on the other hand, is “a measure of one’s purpose to undertake a specific behaviour” (Ajzen, 1991). It is replaced by entrepreneurial intention, which refers to a clear desire to become an entrepreneur (Krueger et al., 2000). According to the theory of planned behaviour by Ajzen (Ajzen, 1991), a person’s actions are determined by three antecedents: attitude (the degree to which a person has a favorable or unfavourable assessment of the conduct in question), subjective norm (the degree to which a person perceives social obligation to conduct the behaviour or not), and perceived ease or difficulty in performing the behaviour (PBC) (Armitage & Conner, 2001; Shyti & Paraschiv, 2015). Ajzen (1991) implies that the motivating factors that drive behaviour should also influence intentions because intentions are measurements of how much people are willing to attempt and how much commitment they intend to put out to carry out the activity (Othman & Mansor, 2012).

2.2. Entrepreneurial intentions

Entrepreneurial intention refers to an individual’s mindset, attitude, and inclination towards starting a new business venture. It represents the individual’s willingness and motivation to become an entrepreneur and actively engage in entrepreneurial activities (Krueger et al., 2000). Similarly, Entrepreneurial intentions can be defined as “A state of mind that guides individuals’ actions to build and develop a new business or entrepreneurial activity (Pandit et al., 2018; Paul et al., 2017). In similar lines, Entrepreneurs can identify, evaluate, and accumulate the tools needed to exploit particular opportunities and take the necessary actions to achieve success (Armitage & Conner, 2001; Ashokan et al., 2019). There has been a lot of discussion about the role of personality qualities in creativity and entrepreneurship. Such disputes establish discrepancies by confirming a vital relationship between many components of personality, such as extroversion, conscience, knowledge sensitivity, and emotional maturity, and their relationship with entrepreneurial ambitions (Al-Jubari et al., 2019). According to the literature, a person’s decision to become an entrepreneur is deliberate and active, i.e., entrepreneurial intention (EI) is the conscious state of mind that precedes action and directs attention to a goal (entrepreneurship) (Jena, 2020; Twum et al., 2021). Also, Entrepreneurship is attained by people who genuinely believe that a particular method to an unresolved difficulty or necessity has been discovered and who are willing to put in a lot of effort to meet these demands (Boubker et al., 2020). Those people are eager to do everything with their minds to become entrepreneurs. Entrepreneurial intention (EI) is often studied in entrepreneurship research and is crucial in understanding the factors influencing entrepreneurial behavior. Likewise, Krueger et al. (2000) favoured TPB as a valuable model as it offers better explanations and predictions of entrepreneurial behaviour.

2.2.1. Attitude

According to Ajzen (1991), an individual’s attitude toward entrepreneurship is defined as the degree to which they think starting a new firm is a good idea. When a person has views on something, that person’s attitude toward that thing changes (the entrepreneur’s intention). As a result, a person’s entire set of significant beliefs and the evaluations associated with them shape their attitudes (Tsordia & Papadimitriou, 2015). According to Ngah et al. (2016), a person’s thoughts and attitudes are the only factors that determine their behaviour, and these factors

significantly impact how that person behaves. Individuals' judgments of their abilities to execute specific tasks raise the likelihood of their attitude becoming an intention and then behavior (Ajzen, 1991). As a result, the more positive a person's attitude toward a given scenario (entrepreneurial ambitions), the more likely they are to succeed (Tiwari et al., 2019). According to the findings, an individual's attitude toward the behaviour refers to how positive they think establishing a new business is (Puni et al., 2018; Rees & Shah, 1986). Students can develop a personal good attitude toward entrepreneurial goals in the future as a result of the developing economic and unemployment challenges (Sánchez, 2013). In light of this, the present study proposes the following hypothesis:

H1: Attitude towards sustainable tourism entrepreneurship significantly and positively influences sustainable tourism entrepreneurship.

2.2.2. *Subjective norms*

The perceived social pressure to perform or not perform a desired activity is called a subjective norm, also known as a social norm (Puni et al., 2018). Family, friends, and society all have an impact on an individual's decision to become an entrepreneur. In most situations, a person would not want to break from the norms and values maintained by close family and even friends with whom they interact on a regular basis. Furthermore, according to certain studies, relationship support plays a critical role in developing entrepreneurial intentions in people (Ljubotina & Vadrjal, 2017). Kolvereid (1996) reveals a favorable and significant link between subjective norms and entrepreneurial intent. According to a study, the greater one's grasp of subjective norms on entrepreneurial behaviour, the stronger one's entrepreneurial purpose (Skudiene et al., 2010). As a result, "subjective norms" refers to the seeming social pressures to engage in or refrain from certain behaviours (Ajzen, 1991; Othman & Mansor, 2012). This type of pressure can come from family or society as a whole, forcing someone to fulfil or not fulfil certain responsibilities (Pauceanu et al., 2018). In light of this, the present study proposes the following hypothesis:

H2: Subjective norms significantly and positively impact sustainable tourism entrepreneurship.

2.2.3. *Perceived behavioural control*

The perceived ease or difficulty of doing a monitored action is referred to as PBC (Ajzen, 1991). Perceived behavioural control is a precursor of TPB theory, which has been employed by entrepreneurship scholars for a long time and is currently considered one of the most prominent works in studying entrepreneurship ambitions among researchers (Nghah et al., 2016; Pandit et al., 2018). As a result, PBC refers to an individual's control beliefs about the observed action (Liu et al., 2019). PBC also refers to a person's control beliefs about the behaviour in question. The ease or difficulty of completing a behaviour is referred to as PBC (Van Gelderen et al., 2008). Bagheri and Pihie (2014) suggest that students with robust perceived behavioural control are thought to have high entrepreneurial inclinations. Furthermore, evidence reveals that an individual's surroundings, resources, and processes can significantly impact their intent to start a business. Thus, based on the existing studies, we argued the following hypothesis:

H3: Perceived behavioral control significantly and positively impacts sustainable tourism entrepreneurship.

2.2.4. *Entrepreneurship education*

Entrepreneurship education is related to the ability of the individual to take action in favour of knowledge and skills (Fragoso et al., 2020). Previous research believed that entrepreneurial education has an essential role in improving the skills of individuals that stimulate business activities (Rahman et al., 2019). Petersen et al. (2021) remarked that entrepreneurial education has two key features. First, through entrepreneurial learning actions, it facilitates individuals' transfer of

knowledge, skills, and entrepreneurship experiences (Afriyie & Boohene, 2014; Quartey & Miskolci, 2017). Second, entrepreneurial education through field studies motivates individuals to be successful in the future. Moreover, a study argued that entrepreneurial education provides help to individuals in achieving entrepreneurial intention through social networks and the experience of successful entrepreneurs (Anwar et al., 2020). Entrepreneurial education assists individuals in obtaining minimal resources through appropriate knowledge sharing and information transfer. Therefore, individuals interested in entrepreneurial learning are likelier to engage with peers and fellows and promote the entrepreneurial image (Anwar et al., 2022; Farhangmehr et al., 2016). The role of entrepreneurial education in entrepreneurial intentions can be demonstrated by understanding business education (Sriyakul & Jermstittiparsert, 2019). Entrepreneurship education allows individuals to improve their mindfulness and entrepreneurial intention for a career path (Abdullahi et al., 2021). The primary function of entrepreneurial education focuses on enriching knowledge, skills, and attitudes towards entrepreneurship (Nuringsih & Puspitowati, 2017). Thus, based on the existing studies, we argued that individuals who perceive a high level of entrepreneurial education are more likely to pursue a career in entrepreneurship. Hence, this study hypothesized that:

H4: Entrepreneurial education is positively and significantly related to sustainable entrepreneurial intention.

3. Research methodology

3.1. Sample and procedure

The research design was cross-sectional. A pilot survey was carried out to assess the validity of the survey questions (Manzoor et al., 2018). The questionnaire was revised based on the feedback from the pilot survey. The revised questionnaire was used in the primary survey. This study used non-probability sampling techniques for the formal survey. Among the non-probability sampling, researcher-controlled sampling was used to gauge the data for the analysis. For this study, 400 tourism university students were surveyed over four months in 2022. The elimination of invalid questionnaires resulted in 350 valid questionnaires. The response rate for the present study was 87.5%. They were selected for the research due to the increasing importance and growing interest in students' green tourism entrepreneurship desires within India. Moreover, researchers have argued that during the post-graduation stage of development, most entrepreneurs form their intentions and engage in start-up activities (Fuller et al., 2018; Neneh, 2019). Likewise, according to Bentler and Chou (1987), Lowry and Gaskin (2014), and Mehraj & Qureshi (2020), samples should be at least five times the number of estimated parameters, and Boomsma & Hoogland (2000) claimed that sample size in the 200–400 range is the most appropriate for SEM analysis.

3.2. Measurement

The Entrepreneurial Intention Scale modified by Manzoor et al. (2018) was used for measuring attitude, subjective norm, perceived behavior control, and entrepreneurial intention. In order to measure attitude towards entrepreneurship, seven items were adapted from Linan and Chen (2009) and Krueger et al. (2000). Accordingly, to measure subjective norms towards sustainable tourism entrepreneurship, six items were adapted from Shook and Bratianu (2010) and Autio et al. (2001). Seven items were adapted from Autio et al. (2001, 2014) to measure perceived behavioural control towards sustainable tourism entrepreneurship. Five items were adapted from Abdullahi et al. (2021, 2019) to measure entrepreneurial education towards sustainable tourism entrepreneurship. Finally, to measure sustainable tourism entrepreneurial intention, a scale comprising six items was amended from the research as mentioned earlier (Bagozzi et al., 2003; Krueger et al., 2000; Linan & Chen, 2009). This scale covers 31 items where tourism students were asked to score whether they agreed with different propositions (five-point Likert scale: 1 = strongly disagree; 5 = strongly agree).

4. Results

In order to check construct validity, confirmatory factor analysis was performed using IBM AMOS version 23. Multiple model fit indices were used to measure the adequacy of the measurement model, such as goodness of fit indices, (CMIN/df > 3), a root-mean-square error of approximation (RMSEA > 0.08), a standardized root-mean-square residual (SRMR > 0.1), a comparative fit index (CFI > 0.90), a goodness-of-fit index (GFI > 0.90), an incremental fit index (IFI > 0.90), and Tucker-Lew's index (TLI > 0.9) (Hooper et al., 2008) (Hooper et al. Convergent validity and discriminant validity assessments were conducted by using CR and (Fornell & Larcker, 1981; Hair et al., 2010) criterion, respectively. The measurement model provides an adequate goodness-of-fit index. The model fit indices for first-order CFA are: $\chi^2 = 362.5$, $df = 203$, CMIN/df = 1.78, CFI = 0.969, IFI = 0.933, GFI = 0.970, SRMR = 0.034, RMSEA = 0.052.

4.1. Scales and model evaluation

Internal consistency, convergent validity and discriminant validity were investigated to assess the constructs. To check internal consistency, composite reliability values were examined. All (Table 2) were between 0.70–0.90, which is the satisfactory range (Nunally & Bernstein, 1994). Average variance extracted (AVE) values of the constructs and factor loadings of the indicators were assessed to check convergent validity. All the AVE values (Table 2) are over the suggested threshold 0.5 (Fornell & Larcker, 1981; Hair et al., 2010). Besides factor loadings (Table 1) are over the suggested threshold 0.6 (Fornell & Larcker, 1981; Hair et al., 2010).

To satisfy the requirement of discriminative validity, the square root of a construct's AVE must be higher than the correlations between the construct and other constructs in the model (Fornell & Larcker, 1981; Hair et al., 2010). Table 2 shows the correlation matrix for the constructs; the square root of the constructs AVE has replaced the diagonal elements. Constructs show adequate discriminant validity since these diagonal values are higher than the off-diagonal values in the corresponding rows and columns (Hair et al., 2010).

4.2. Model testing

In order to verify the proposed relationships, structural equation modelling (SEM) was used (Figure). The structural model reveals a good model fit. All the indicators of model fit fall within the acceptance region. The ratio of Chi-square to df ($676.796/346$) = 1.956; GFI = 0.901; AGFI = 0.884; NFI = 0.933; CFI = 0.949; RMR = 0.035; and RMSEA = 0.051, were all significant. Table 3 shows that standardized regression weights for the paths AT to STEI, SN to STEI, EE to STEI and PBC to STEI are significant. In Figure, the values of the standardized regression weights AT, PBC, SN, and EE on STEI are presented. Our model explains 34 per cent of the variance in STEI due to AT, SN, EE and PBC. The attitude towards sustainable tourism entrepreneurship positively and significantly impacted sustainable tourism entrepreneurial intention, and their standardized path coefficients were 0.358***. Thus, H1 was supported.

Meanwhile, subjective norms directly and significantly impacted sustainable tourism entrepreneurial intention, with standardized path coefficients in the order of 0.355***. Thus, H2 was supported. Perceived behavioural control had a direct and significant effect on sustainable tourism entrepreneurial intention, having standardized path coefficients in the order of 0.227***. Thus, H3 was supported. Likewise, entrepreneurial education directly and significantly affected sustainable tourism entrepreneurial intention, with standardized path coefficients in the order of 0.186***. Thus, H4 was supported (Table 3).

5. Discussion

Confirmatory factor analysis (EFA) revealed the existence of five underlying factors: attitude, subjective norm, perceived behavioural control, entrepreneurial education, and entrepreneurial intention, which play a significant role in the green tourism entrepreneurial intention of university tourism students in India. SEM analysis was performed to examine the effect of predictors identified through CFA, and the results of the present study show that attitude, subjective norm,

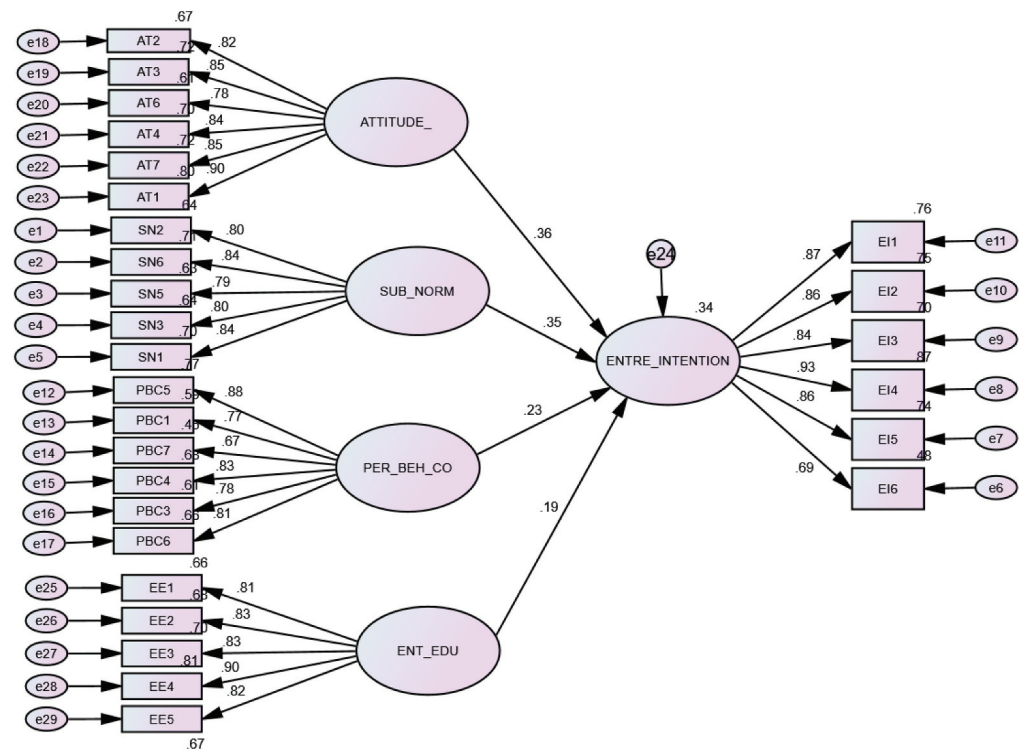
Table 1. Confirmatory factor analysis

	Factors	Item code	Standard Estimates
<i>Attitude Towards Sustainable Tourism Entrepreneurship</i>	<i>I will choose green tourism entrepreneurship as a career choice</i>	AT1	.896
	<i>Being a green tourism entrepreneur would entail great satisfaction for me.</i>	AT2	.815
	<i>Among various options, I would rather be a green tourism entrepreneur.</i>	AT3	.852
	<i>Being a green tourism entrepreneur would help me to acquire personal security.</i>	AT4	.836
	<i>I want to enjoy the excitement of being a green tourism entrepreneur.</i>	AT6	.784
	<i>I will prefer to be a green tourism entrepreneur rather than an employee in a company</i>	AT7	.847
<i>Subjective Norm</i>	<i>I have access to supporting information to be a green tourism entrepreneur</i>	SN1	.840
	<i>My closest family members think I should pursue a green tourism entrepreneur career.</i>	SN2	.802
	<i>If I became a green tourism entrepreneur, my close friends would appreciate it.</i>	SN3	.803
	<i>If I were to start my own business, my parents' opinions would be important to me.</i>	SN5	.795
	<i>If I were to start my own business, my close friends' opinions would be important to me</i>	SN6	.835
<i>Perceived Behavioural Control</i>	<i>I am prepared to start a sustainable firm.</i>	PBC1	.771
	<i>I know the necessary practical information to start a firm.</i>	PBC3	.783
	<i>I know how to develop an entrepreneurial project.</i>	PBC4	.826
	<i>I believe that if I were to start my own business, I would certainly be successful</i>	PBC5	.871
	<i>To start a firm and keep it working would be easy for me</i>	PBC6	.815
	<i>I can control the creation process of a new firm</i>	PBC7	.677
<i>Entrepreneurial Education</i>	<i>The entrepreneurial education model in the formal setting promotes the creative ideas</i>	EE1	.814
	<i>The learning model in the classroom provides the required knowledge for tourism entrepreneurship.</i>	EE2	.825
	<i>Education in university drives skill and ability related to tourism entrepreneurship.</i>	EE3	.836
	<i>The education activities incorporate entrepreneurship matters and allow opportunities to students to begin a business.</i>	EE4	.897
	<i>I think that tourism entrepreneurship occasion could be enlarge through education activities.</i>	EE5	.817
<i>Sustainable Tourism Entrepreneurial Intention</i>	<i>My professional goal is to become a tourism entrepreneur.</i>	ER1	.893
	<i>After completing the study, I thought about starting my own tourism business.</i>	ER2	.879
	<i>I am determined to create a tourism firm in the future.</i>	ER3	.858
	<i>I will make every effort to start and run my firm.</i>	ER4	.947
	<i>I intend to be self-employed rather than being employed by others.</i>	ER5	.890

Table 2. Construct validity

Constructs	CR	AVE	MSV	SN	EI	PBC	AT	EE
SN	0.908	0.664	0.254	0.815				
STEI	0.948	0.754	0.267	0.504***	0.869			
PBC	0.910	0.628	0.267	0.491***	0.516***	.793		
Attitude	0.934	0.704	0.242	0.222***	0.492***	.409***	0.839	
EE	0.922	0.703	0.106	0.162*	0.326***	.295***	0.183**	0.838

Figure 1. SEM MODEL.
Source: Prepared by the authors.



perceived behavioural control, and entrepreneurial education are the predictors of green entrepreneurial intentions among university tourism students. This study is in line with the theory of planned behaviour. Our results confirmed a statistically significant positive relationship between attitude, subjective norm, perceived behavioural control, entrepreneurial education, and entrepreneurial intention of tourism students, which indicates that tourism students view entrepreneurship as an attractive career, advantageous given opportunity and resources, and would pursue entrepreneurial ventures. This result confirms other studies (Das & Sahu, 2018; Kim-Soon et al., 2016; Roy et al., 2017; Shirokova et al., 2016; Tsordia & Papadimitriou, 2015), which also found positive relationships between attitude, subjective norm, perceived behavioural control, and entrepreneurial intention among students.

Thus, the present study delineates the importance of “attitude, subjective norm, entrepreneurial education, and perceived behavioural control in determining university tourism students’ sustainable tourism entrepreneurial intention. Therefore, the students should be guided and cultivated to enhance green start-ups. The concept of perceived behavioural control plays a crucial role in shaping students’ entrepreneurial intentions. It is the degree to which individuals believe they have control over their behaviour, which is positively related to entrepreneurial intention. In addition to perceived behavioural control, other factors such as attitude, subjective norms, and

Table 3. Structural path analysis (hypotheses testing)

DV		IV	Estimate	S.E.	C.R.	P	Hypotheses	Result
STEI	<—	ATTITUDE	.358	.046	5.931	***	H1	supported
STEI	<—	SUB_NORM	.355	.064	5.398	***	H2	supported
STEI	<—	PER_BEH_CON	.227	.060	3.604	***	H3	supported
STEI	<—	ENT_EDU	.186	.060	3.604	***	H4	supported

entrepreneurial education also influence students' intention towards entrepreneurship. The study highlights these factors' importance in determining university tourism students' sustainable tourism entrepreneurial intention. By guiding and cultivating students towards green start-ups, universities can contribute to developing sustainable tourism practices. This can be achieved by providing relevant courses and Training programs focusing on sustainability and entrepreneurship. Such initiatives can inspire and motivate students to pursue environmentally responsible business ventures that benefit both society and the environment. Ultimately, this can lead to a more sustainable future for all.

6. Conclusion

After analyzing the factors affecting entrepreneurial intention for sustainable tourism among students of institutions of higher learning, including attitude, subjective norms, perceived behavioral control, and entrepreneurial education, it can be concluded that these factors significantly influence the formation of entrepreneurial intentions. The study demonstrates that students with a favourable attitude towards sustainable tourism are likelier to have entrepreneurial ambitions in this field. In addition, the study suggests that subjective norms play a significant role in shaping students' intentions, as they are influenced by the standards and expectations of their social environment. Perceived behavioural control was discovered to be a significant factor influencing entrepreneurial intent. Students who believe they have control over their behaviour and resources are more likely to have entrepreneurial aspirations in the field of sustainable tourism. This finding indicates that students must have access to resources and support in order to develop their entrepreneurial skills and goals. It was discovered that entrepreneurial education is a crucial factor that increases students' entrepreneurial intentions for sustainable tourism. Education and training programmes that equip students with the skills and knowledge necessary to develop and implement sustainable tourism business ideas can increase their entrepreneurial aspirations. The study's findings highlight the need for stakeholders in higher education institutions and the tourism industry to provide assistance and resources to students with entrepreneurial ambitions. Governments should also create an enabling environment for entrepreneurship development and support policies that promote sustainable tourism. Overall, the study provides valuable insights into the factors that contribute to forming entrepreneurial intentions for sustainable tourism among students. Hopefully, these findings will guide policymakers, educators, and industry stakeholders in developing effective strategies to foster sustainable entrepreneurship among students in higher learning institutions.

6.1. Implications

6.1.1. Theoretical implications

Our study has some implications for potential entrepreneurs, policymakers, and academicians in order to accelerate students' green entrepreneurial behaviors. This study aligns with the findings of Martínez-Cañas et al. (2023), who discuss the impact of "push" and "pull" motivations on entrepreneurial intentions. "push" factors, such as dissatisfaction with traditional job prospects, can drive students to explore sustainable tourism entrepreneurship, while "pull" factors, like the desire for autonomy and job creation, can further motivate them. Recognizing these multifaceted motivations is essential for fostering green entrepreneurial behaviors among students. Students interested in sustainable tourism entrepreneurship must not only be aware of the potential risks and uncertainties associated with the field but

also be trained to identify opportunities within the green tourism sector. This knowledge equips them to make informed decisions and strengthens their entrepreneurial intentions, addressing a critical aspect of sustainable entrepreneurship education (Martínez-Cañas et al., 2023). Our research suggests a fundamental shift in entrepreneurship education, echoing the recommendations made by Martínez-Cañas et al. (2023). Conventional entrepreneurship education often revolves around theoretical concepts, leaving a gap when it comes to preparing students for the realities of sustainable tourism entrepreneurship. Sustainable entrepreneurship education, as proposed, seeks to cultivate entrepreneurs with economic, ecological, and social values. It goes beyond conventional teachings by emphasizing sustainable business practices and concepts. This shift is essential for nurturing the next generation of entrepreneurs who can thrive in the green tourism sector. Building on the insights provided by Ruiz-Palomino et al. (2023), our study acknowledges the critical importance of gender diversity and inclusivity in entrepreneurship, particularly within the sustainable tourism sector. Encouraging women's participation in social entrepreneurship and the broader entrepreneurial landscape is vital. Promoting diversity of thought and innovative solutions in tourism is not only a matter of social equity but also a pathway to a more dynamic and sustainable industry. Furthermore, circular business models, as discussed by Alcalde Calonge et al. (2022), have relevance for sustainable tourism entrepreneurship. Circular models align with sustainable tourism practices by minimizing waste, enhancing resource efficiency, and promoting sustainable consumption patterns. Incorporating such models into entrepreneurship education and encouraging their adoption among aspiring entrepreneurs can further the sustainability goals of the tourism industry. Lastly, social networks play a pivotal role in entrepreneurship, as emphasized by Ruiz-Palomino and Martínez-Cañas (2021). Building supportive entrepreneurial networks, including family and friends, can significantly impact opportunity recognition and the successful launch of sustainable tourism ventures. Encouraging students to tap into these networks and fostering collaboration between academia and industry can enhance research and development efforts, ultimately benefiting the sustainable tourism sector.

6.1.2. Practical implication

Theoretical learning can be an excellent foundation for any field, but the practical application truly sets individuals apart. In the case of sustainable tourism, policymakers can take action by developing specialized entrepreneurial programs. These programs could include workshops and capacity-building initiatives to enhance university students' skills. Policymakers can encourage innovation and entrepreneurship in the industry by targeting creative and dynamic tourism students or graduates. This would create new business opportunities and promote sustainable practices in tourism. Such initiatives would have practical implications as they equip students with the necessary tools to turn their ideas into successful ventures. Policymakers can foster a culture of creativity and sustainability by providing students or graduates with the resources and support to pursue innovation and entrepreneurship in the tourism industry. This could involve offering mentorship programs, access to funding, and networking opportunities with industry leaders. Policymakers can also help diversify the tourism industry and promote economic growth by encouraging new business ventures.

Furthermore, promoting sustainable practices in tourism through these initiatives can have long-lasting positive effects on the environment and local communities. Equipping students with the skills to turn their ideas into successful ventures benefits them individually and contributes to the industry's overall success. By investing in the next generation of entrepreneurs, policymakers can create a brighter future for both tourism and society. Ultimately, this would contribute to the industry's growth while promoting sustainable practices and responsible tourism.

6.2. Limitations/Future research

Our study on sustainable tourism entrepreneurial intentions among the students of higher education institutions, while providing valuable insights, does possess inherent limitations in its scope and potential impact. These limitations offer opportunities for future research that can significantly enrich our understanding of entrepreneurship in the context of sustainable tourism.

First and foremost, it is important to address the limitation posed by our study's relatively small sample size, which primarily focused on tourism students at a single institution. This constraint raises concerns regarding the generalizability of our findings beyond the confines of the Kashmir region. To address this, future research endeavors should consider expanding the sample size to include students from diverse geographical regions. A larger and more diverse participant pool would bolster the accuracy and applicability of the results, enabling us to draw broader and more insightful conclusions. Our study identified specific variables influencing sustainable tourism entrepreneurial intentions among university students. Nevertheless, entrepreneurship is a multifaceted endeavor influenced by a multitude of factors. To capture the full spectrum of these influences, future research should endeavor to incorporate a broader range of variables, extending beyond those initially examined in our study. By doing so, researchers can gain a more comprehensive understanding of the intricate interplay of factors shaping entrepreneurial intentions among students, thereby contributing to a more nuanced and enriched body of knowledge in this field.

Furthermore, our study was confined to the specific context of the Kashmir region, limiting the broader applicability of our findings. To provide a more holistic view of the entrepreneurial landscape, future research should explore entrepreneurship in diverse geographical regions. This expansion should encompass not only other states but also other countries. By conducting a comparative analysis of potential entrepreneurs across different regions and cultures, researchers can unearth patterns and trends that might be obscured when focusing solely on a single area.

Such comparative research can facilitate the development of more effective policies and programs to support entrepreneurship, tailored to the unique needs and circumstances of each region. Additionally, it can offer valuable insights into the factors contributing to successful entrepreneurship across borders, providing a basis for the dissemination of best practices and the promotion of economic growth on a global scale.

A critical avenue for future research, as inspired by the insights of Ruiz-Palomino et al. (2023), involves the consideration of gender diversity and inclusivity within entrepreneurship, especially within the sustainable tourism sector. Recognizing the pivotal role of women's participation in social entrepreneurship and the broader entrepreneurial landscape is of paramount importance. Promoting diversity of thought, innovative solutions, and equal opportunities in tourism entrepreneurship not only fosters social equity but also represents a promising pathway towards a more vibrant, dynamic, and sustainable industry.

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