



Determinants for Sustainable Entrepreneurial Intentions: A Systematic Literature Review

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ABSTRACT

Sustainable entrepreneurship has emerged as a vibrant domain within the field of entrepreneurship, especially in recognition of ecological issues, entrepreneurship is a solution to environmental problems now a day. Substantial studies have been conducted to understand the phenomena of sustainable entrepreneurship. This review aims to provide theoretical basis for understanding scholarly thoughts, which highlights some key determinants of sustainable entrepreneurial intentions. Based on Theory of Planned Behavior (TPB) (Ajzen, 1991) and Shapero's (1982), Entrepreneurial event model (EEM), this review analyzes literature and discusses the main antecedent, which elaborates our collective understanding about the nature of sustainable entrepreneurial intentions. The review critically discusses the dominant approaches which foster the research on sustainable entrepreneurship in theory and practice.



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1. Introduction

The research in the field of entrepreneurial intention (EI), receives significant attention after tremendous work on EI and its contribution for economic growth across glob (Maheshwari, Kha, & Arokiasamy, 2023; Mehraj et al., 2023). A thorough analysis of the body of research indicates that encouraging entrepreneurship results in strong economic growth (Qian & Acs, 2023; Zemlyak, Gusarova, & Khromenkova, 2023). Researchers believe that while economic progress has made prosperity easier for people through globalization, urbanization, and digitization, the overuse of resources in this process has had a detrimental effect on society and the environment (Rahman, 2020). In order to fulfill its goal of guaranteeing

sustainable development, the sustainable entrepreneurship (SE) has drawn the interest of academics, professionals, and decision-makers currently (Fidlerová, Stareček, Vraňáková, Bulut, & Keaney, 2022). Furthermore, cohesive theoretical frameworks from the domain of "social psychology" have added implicitly in EI literature (Ajzen, 1991; Bandura, 2006). Exploration of different entrepreneurial intention models advances the generalizability of concept in various settings (Liñán & Fayolle, 2015). In the past decade, sustainable entrepreneurial research has received significant attention from scholars by providing solutions to social and environmental issues (Ralph & Stubbs, 2014). The advances in sustainable entrepreneurship, it is essential to identify and investigate the particular characteristics that give rise to a sustainable entrepreneurial ecosystem, as the research now available on the topic is generic (Theodoraki, Dana, & Caputo, 2022). Sustainable entrepreneurship reflects an advanced form of ecopreneurship and social entrepreneurship, which provides ecological solutions for society (Schaltegger & Wagner, 2011). The United Nation Sustainable Development Goals is determined to reduce poverty, maintain earth's sphere and make sure all mankind enjoys peace and prosperity by the end of 2030 (UNDP, 2020).

Ecological and sustainable entrepreneurship primarily included innovative, personality-driven and market-oriented approaches to generate economic and societal value through the means advances environmentally or socially favorable market or institutional innovations (Schaltegger & Wagner, 2011). On other hand green environmental practices involve decreasing and reutilizing resources which provide commercial and social firmness in addition to environmental stability (Wong, Lai, Shang, Lu, & Leung, 2012). Ecological entrepreneurs strive to protect the environment while creating market value (York, O'Neil, & Sarasvathy, 2016; York & Venkataraman, 2010). Previous research emphasizes that any planned behavior is a result of intentions and both are deeply interlinked together (Bagozzi, Baumgartner, & Yi, 1989). An intention serves as a means to understand human behavior Ajzen (1987), especially when behavior of individuals is hard to observe and anticipate (Ajzen, 1991). Systematic literature review shows that individual's intentions successfully predict human actions, and attitudes towards action in diverse settings (Kim & Hunter, 1993).

Different frameworks have been widely utilized to explain the connectedness between behavior and intention, included entrepreneurial event model Shapero and Sokol (1982), TPB presented in 1991 by Ajzen. It received a significant attention by scholars and provides many avenues for future directions in entrepreneurial behavioral research (Krueger Jr, Reilly, & Carsrud, 2000). Scholars claim that human intentions constitute the basic component of entrepreneurial actions (Kolvereid & Isaksen, 2006; Krueger Jr et al., 2000). In entrepreneurial literature, EI are referred as aspiration to initiate a new business (Khan, Mubushar, Khan, Rehman, & Khan, 2021). Despite numerous entrepreneurial research literature numerous entrepreneurial research frameworks have been widely used which are less predictive Krueger and Carsrud (1993), therefore academic researcher's emphasis is to consider two specific targeted models including " framework (1991)" and " Model (1982) " (Krueger Jr et al., 2000). This research aligns with the conclusion of prior study and examines determinants of sustainable entrepreneurial intentions through these models and explores potential moderating and mediating variables. This study will explore these determinants by categorizing them as personality mechanism, support mechanism and value mechanism through the lens of TPB Ajzen (1991) and EEM (Shapero & Sokol, 1982).

2. Systematic Review

This study purposes to scrutinize literature on sustainable entrepreneurial intentions, factors effecting entrepreneurial intentions and theoretical frameworks used in research to analyze this mechanism. The process of systematic review has been widely adopted in health sciences but also in the field of management sciences (De Menezes & Kelliher, 2011). A systematic literature evaluation serves as a foundation for increasing theoretical knowledge and understanding by identifying future research areas within the field (Webster & Watson,

2002). Some scholars refer to systematic literature reviews as knowledge maps, which present an overview of past publications in the topic (Frank & Hatak, 2014). Systematic literature reviews are so important that many researchers have articulated different guidelines which a researcher needs to consider before writing a systematic literature review (Aguinis, Ramani, & Alabduljader, 2018; Booth, James, Clowes, & Sutton, 2021; Frank & Hatak, 2014; Tranfield, Denyer, & Smart, 2003; Webster & Watson, 2002). Research shows that considerable variance has been identified regarding nature and quality of review. A literature review aims to summarize and categorize knowledge with right breadth and depth by focusing on concepts, not studies (Block, Fisch, & Van Praag, 2017). The "Six step approach" proposed by Block et al. (2017), provides guidelines for researchers, especially within the field of management sciences, to conduct a systematic literature review. Therefore, this research follows "six step" approach for systematic review to examine the leading factors of sustainable entrepreneurial intentions and factors effecting sustainable EI. This research will also adopt the methodological review mechanism projected by Muñoz and Cohen (2018), as a guideline for sustainable entrepreneurial research.

3. Methodology

A systematic literature review seeks to address the specific research issues, which a researcher aims to investigate. It further helps researcher to find relevant literature from different data bases. This study purpose to address the following research question, 1) "What are the elements influencing the sustainable EI"? 2) "How TPB explains the association between sustainable EIs antecedents"? Ajzen (1991) 3) "How EEM explains the association among sustainable EI antecedents" Shapero and Sokol (1982) ? 4) What are the latent moderators and mediators discussed to establish this sophisticated mechanism? Researchers argue that other models of entrepreneurial intentions have less predictive power, making it is appropriate to consider Azjen's (TPB) and Shapero's (EEM) frameworks (Krueger Jr et al., 2000). Based on literature, EI are referred as an individual's willingness to engage in entrepreneurial activities, which reflects the individual aspiration to develop new business (Bae, Qian, Miao, & Fiet, 2014). Additionally, entrepreneurial behavior is defined as a blend of ideas, resources and capital, along with creative and empowerment elements (Borasi & Finnigan, 2010). Thus, sustainable EI is referred as a potential for an individual to carry out sustainable entrepreneurship (Sendawula, Turyakira, & Alioni, 2018). Muñoz and Cohen (2018) refer to sustainable entrepreneurship as conducting business practices in sustainable way to gain competitive advantage.

In choosing studies for systematic review, we focused on sustainable entrepreneurial intentions, rather than sustainable entrepreneurship, entrepreneurial intentions or entrepreneurial behavior or similar constructs. We excluded studies with similar constructs and included only those reflecting the definition of sustainable entrepreneurial intentions. Keywords were identified from our definitions and review questions, including "Sustainable entrepreneurial intentions", "green entrepreneurial intentions", "ecopreneurial intentions", and "Sustainable venture intentions". The data bases searched included EBSCO essentials, ProQuest, Emerald, Science Direct, Web of Knowledge and Sage. Due to the limited number of research articles in impact factor journals, no time filter was applied to ensure a sufficient number of articles. Initially abstracts were reviewed and identified 88 empirical articles, through fundamental focus of key objectives excluded the irreverent research domains. Ultimately 52 empirical articles were selected based on relevance and quality (Block et al., 2017). Data were extracted and synthesized by addressing the review question and providing an overview of different methodological approaches used in the articles.

4. Literature Review

Entrepreneurship holds great significance in economic and societal growth of a country Shane and Venkataraman (2000), and solving environmental and societal issues like global warming (Dean & McMullen, 2007). EI is described as an individual’s self-recognized commitment to ascertain a new business venture, with deliberate intention of doing in the future” (Thompson, 2009). The idea of EI was first described as a straightforward, progressive process with specific individual features that resulted in the establishment of a definite intention to launch a new (Yang, Gong, & Huo, 2011). One can trace the origins of the idea of SEI to the idea of EI. The term "SEI" describes a mentality that integrates EI with the environmental and social aspects of value generation (Nițu-Antonie, Feder, Stamenovic, & Brudan, 2022; Pascucci, Cardella, Hernández-Sánchez, & Sánchez-García, 2022). Despite the interest in understanding entrepreneurial intentions, other entrepreneurial contexts got limited attention (Vuorio, Puumalainen, & Fellnhofer, 2018). Young adults such as “(“millennials” or “Generation Y”), are more environmental conscious and socially aware, raising a research question what drives sustainable entrepreneurial intentions. Sustainable entrepreneurial intentions differ from other form of entrepreneurship because they create value beyond just economic gains (Cohen & Winn, 2007; Fayolle, Liñán, & Moriano, 2014; Seelos & Mair, 2005; Zahra, Gedajlovic, Neubaum, & Shulman, 2009). Certain types of entrepreneurship are perceived as more attractive, motivating individuals to pursue value added entrepreneurial venture (Baron, 2006). Therefore, this research aims to explore different antecedents of sustainable entrepreneurial intentions to understand how entrepreneurship varies across different types. Figure 1 shows the breakdown of sustainable entrepreneurial intentions based on empirical literature.

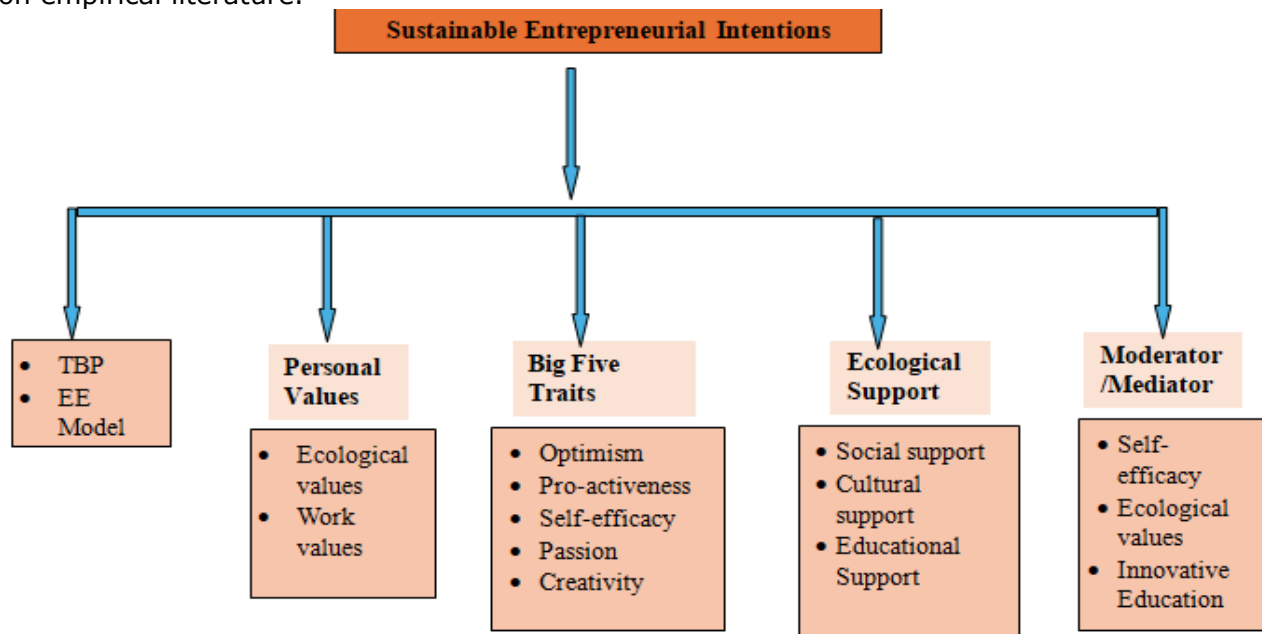


Figure 1: Conceptual Framework

4.1. Personality Mechanism

The term “personality” highlights long-term traits that inspire people to adopt specific actions (Markman & Baron, 2003). Research indicates a strong link between a specific attitude and particular behavioral intentions (Fanea-Ivanovici & Baber, 2022). These long term enduring characteristics shape an individual’s personality and have garnered significant attention from scholars investigating personality and its influence on innovative ventures (Kumar & Bhattacharyya, 2020; Şahin, Karadağ, & Tuncer, 2019). Research scholars related entrepreneurial intentions with personality, Leutner, Ahmetoglu, Akhtar, and Chamorro-Premuzic (2014); Munir, Jianfeng, and Ramzan (2019); Sim, Galloway, Ramos, and Mustafa

(2023), but the relation of personality traits and sustainable EI got limited attention (Khan et al., 2021). This research presents a newest prospective on the impact of personality traits contribute towards creating sustainable entrepreneurial intentions. Starting with Big Five Model (BFM), which aims to focus on fundamental traits comprehensively Goldberg (2013), this research highlights additional personality traits that constructs individual's intentions towards sustainable entrepreneurial intentions. The personality BFM Costa and McCrae (1989), suggests that people possess unique internal orientations that triggers sustainable entrepreneurial intentions. This research explores these personality traits in the upcoming sections.

The personality BFM traits of extraversion present a mechanism for adopting sustainable behavior. Extroverted individuals are sociable, prefer central roles, and are inclined to adopt sustainable behavior (McCracken & Roth, 1989). Extrovert's individuals are more influenced by positive emotions and are likely to motivate by ecological entrepreneurial intentions (Khan et al., 2021). The extroversion feature significantly contributes to positive evaluation and attitudes, helping individuals devote themselves to entrepreneurial ventures (Khan et al., 2021). These people are aggressive and prone to affiliate themselves with environment and build a connectedness of external advisors to pursue their entrepreneurial objectives (Chandler & Jansen, 1992; Judge & Cable, 1997). Research in past years Liang et al. (2019) established considerable linkages between entrepreneurial goals and extraversion personality trait. Another personality trait of FBM agreeableness, relates to honesty and altruism (Argan & Argan, 2017). Individuals possessing agreeableness, indicate altruistic intentions which leading towards helping behavior. Individuals with agreeableness personality are highly willing, modest and sympathetic towards others (Khan et al., 2021). Research confirms that individuals with high degree of agreeableness are more interested in pursuing their careers that benefits society, such as teaching which helps them interacting with others and become beneficial for society (Barrick, Mount, & Gupta, 2003). Agreeableness predicts positive social entrepreneurial ambitions and the opportunity of similar social-oriented entrepreneurial ventures İrengün and Arikboğa (2015); Wang, Chang, Yao, and Liang (2016). Individuals that are highly agreeable, show concerns for those with sustainable EI, reflecting highly positive altruistic behavior (Khan et al., 2021).

Openness to experience implies showing consent to experience new ideas, innovation and individuals that score high in this personality trait are more adaptive and progressive (McCracken & Roth, 1989). These individuals are open minded and enjoy exploring exotic ideas (Costa Jr & McCrae, 1992). On other hand, individuals who score low in openness resist new ideas and changes which negatively effects creativity. Entrepreneurs are creative, enthusiastic and motivated by success (Locke, 2000). The openness personality trait assists individuals in fostering fresh and innovative adoption of a variety of ideas, rather than relying on a limited set of opportunity (Wang et al., 2016; Zhao & Seibert, 2006). Research confirms that people demonstrating significance openness are positively related to sustainable EI and are significant driver of sustainable entrepreneurial intentions (Wang et al., 2016).

Conscientiousness reflects the careful diligent nature of individuals (Khan et al., 2021). This personality dimensions describes achievement patterns, work motivations, self-control and responsible behavior towards others (Costa & McCrae, 1989). Such individuals are innovative, well knowledgeable. Efficient and effective in organizational planning McCracken and Roth (1989), perseverance is closely related to popular imagination of entrepreneurial venture (Markman & Baron, 2003). Individuals scores high in conscientiousness, use solid information and pursue it rationally (Khan et al., 2021). These individuals are well organized in planning organizational goals and showing responsibility towards societal needs (Zhao & Seibert, 2006). Previous research demonstrates that conscientiousness has a favorable effect on sustained business ambitions (Ariani, 2013).

Self-efficacy means appreciation of an individual's abilities to achieve their desired behavior and it motivates pro-social behavior (Giles, McClenahan, Cairns, & Mallet, 2004). As self-efficacy is related with problem identification Bandura (2006), it can also relate with green entrepreneurial intentions, reflecting an individual's confidence in their initiatives to enhance the atmosphere (Chu, Zhang, & Jiang, 2021). According to social determination theory Bandura (2006), individuals are affected by their environment which effects each individual differently. COVID-19 increases new business domains especially in information technology which found positive factor to enhance the sustainable EI (Wang et al., 2021). Unfavorable conditions such as war, terrorism and violent incidents declines individual's self-efficacy and has a negatively effecting entrepreneurial intentions (Gaibulloev & Sandler, 2009). Additionally, It's also seen that the success of china in pandemic prevention and control, government promotes entrepreneurship and innovation for promoting economic recovery through entrepreneurial awareness programs (Wang et al., 2021).

Optimism reflects positive state of mind and contributes to personal long term cause and helps to overcoming the entrepreneurial psychological objective (Giacomin, Shinnar, & Janssen, 2013). Optimistic individuals show positive state towards entrepreneurial intentions and prosocial behavior (Bernoster, Rietveld, Thurik, & Torrès, 2018). Recent research on optimism Zhang et al. (2020) concluded that optimism positively effects work participation during the COVID-19. Now the pandemic has been effectively controlled, therefore research Wang et al. (2021) concluded that individual's cognition and awareness significantly improve their level of optimism and sustainable entrepreneurial intentions. A green entrepreneurial personality consists of long term psychological characteristics of individuals that can effect entrepreneurial spirit and sustainable entrepreneurial intentions (Qazi, Qureshi, Raza, Khan, & Qureshi, 2020). Research conducted on students concluded that optimistic individuals are more confident Lee, Kreiser, Wrede, and Kogelen (2018), and their higher business intentions make them expect more positive results in entrepreneurial activity (Giacomin et al., 2013; Wang et al., 2021). As students are more optimistic their expectations from an entrepreneurial activity become stronger, making them more and likely to choose green entrepreneurial activity (Wang et al., 2021).

Sustainable EI is one of the fundamental factor and performed that proactiveness impact in innovation and idea generation Qazi et al. (2020), and need for achievement are also positively related with green entrepreneurial intentions. People of such traits are likely to pursue their career as an entrepreneur (Bhardwaj, 2014). Social networking sites serve as a platform offering various tools that facilitates information sharing and perform a significant role in entrepreneurial activities (Sargani et al., 2021). The engagement with social networking platform helps individuals to reduce risk at early stage of a business venture (McQuaid, 2011). Supporting the arguments by Ajzen (1991), social networks reshape individual's psychology and stimulates their entrepreneurial intentions. Research reveals that ecological EI of individuals are affected by online networking sites Krueger and Carsrud (1993), and significantly related with each other (Sargani et al., 2021). Social entrepreneurs exhibit high level of creativity Liang et al. (2019); Runco and Jaeger (2012), because new business are often unique, unusual and unexpected (Liang et al., 2019). Previous research has concluded that curiosity and exploration positively affect entrepreneurial intentions (Liang et al., 2019). Furthermore, scholars have also supported that social capital Yang et al. (2011), and creativity are positively related with sustainable entrepreneurial intentions.

4.2. Support Mechanism

Sustainable entrepreneurship is one strategy to fulfilling the SGD's established by the 2030 Agenda (Bellver, Pérez-Campos, González-Serrano, & Martínez-Rico, 2022). Consequently, academic interest has been arising to understand mechanisms constructing entrepreneurial intentions. Universities are gradually taking a shift towards promoting green entrepreneurship by practicing environmentally friendly activities (Qazi et al., 2020). Across

world universities are dynamically occupied in various forms to promote entrepreneurial intentions among students (Suwartha & Sari, 2013). Zhang et al. (2020) noted that higher educational institutions are actively focusing on new idea generation for initiative new business and enhance the environmental values and try to train their students to address environmental challenges. Green entrepreneurial strategies are important for sustainable economic growth of a country by addressing environmental challenges in a positive approach (Bhardwaj & Sushil, 2012; Zhao & Seibert, 2006). Environmental entrepreneurship is one major form of entrepreneurship which appears to help resolve these issues (Cohen & Winn, 2007).

Research has concluded that universities promote green entrepreneurial activities through organizational functions and green entrepreneurial activities (Rothaermel, Agung, & Jiang, 2007). It can be done through incubation centers and technologies parks which provide a platform for green entrepreneurship. Education is a vital component for creating entrepreneurial mindset Ginanjar (2016), especially when it's based on experience learning through green entrepreneurial activities. According to Demirel, Li, Rentocchini, and Tamvada (2019) individual's perceptions regarding green entrepreneurship can be motivated through university support and education (Agu, Kalu, Esi-Ubani, & Agu, 2021). This research presented that learning for sustainable entrepreneurship consists of awareness, knowledge and skills which fosters sustainable entrepreneurial intentions. Education is categorized as key driver for promoting entrepreneurial intentions among students Vuorio et al. (2018) and individual's intentions and desire towards entrepreneurship actually rises with education (Giacomin et al., 2011; Maresch, Harms, Kailer, & Wimmer-Wurm, 2016; Pascucci et al., 2022).

Sustainability focused entrepreneurial courses in education programs provide positive experience and influence level of inculcation towards sustainable EI (Vuorio et al., 2018). UNESCO (2014) concluded that education for sustainable entrepreneurial plays a significant role by providing knowledge and skills required for sustainable EI. Cai, Hussain, and Zhang (2022) Entrepreneurial cultures consist of belief, attitude and values related to entrepreneurial intentions Liñán and Fayolle (2015), depending across different cultures (Capelleras, Contin-Pilart, Larraza-Kintana, & Martin-Sanchez, 2019). The EI is affected from Cultural norms and a country shows respect towards sustainable entrepreneurial intentions it can effect significantly (Alwakid, Aparicio, & Urbano, 2020).

By actively promoting green cultures, a society can effectively direct individuals towards sustainable entrepreneurial ventures (Díaz-Casero, Hernández-Mogollón, & Roldán, 2012). Researchers argue that when colleges, universities and a country actively promote green entrepreneurial culture through policies and social norms it fosters sustainable economic growth of a country (Cai et al., 2022). Green entrepreneurship requires more financial support and technologies compared to other form of entrepreneurship (Welter, 2011). When students are facing financial challenges, their entrepreneurial ventures are delayed (Braun & Sieger, 2021). Therefore, venture capital support, the noteworthy influence on college students plans to engage in intentions to start a sustainable entrepreneurial venture.

4.3. Value Mechanism

Individual life values perform an essential contribution on people life by shaping their attitude and behaviors. In entrepreneurship studies, the word "work values" states the entrepreneurs' perspectives on their role as business vendors (Shevchuk, Strebkov, & Bögenhold, 2024). Research shows that crucial role of work values in promoting entrepreneurship and ensuring its success. According to Ayob, Abd Hamid, and Sidek (2022), cultural norms, personal experiences, and availability to fresh information all impact work values. A person relationship with environment and society determines their value choices (Keogh & Polonsky, 1998). Values derive entrepreneurial behavior and reflect expression of self-interest (Kirkley, 2016). Personal values are fundamental set of norms guiding individuals

in choosing type of entrepreneurial venture (Frieze, Olson, Murrell, & Selvan, 2006). Schwartz (2013) indicates that personal values affect behavioral choices. A strong association between personal and environmental values significantly promotes sustainable entrepreneurial venture (Arru, 2020). The incentive theory emphasizes the significance of both intrinsic and extrinsic rewards in determining work values individually (Nhemachena & Murimbika, 2018). Extrinsic incentives include cash recompense, status, security and, recognition, which individuals receive for their acts (Lin et al., 2022). Intrinsic benefits, including personal fulfillment and a feeling of accomplishment, stem from an individual's activities (Ahmad, 2018). Entrepreneurs who prioritize principles like community and social impact involvement are more likely to develop businesses that solve environmental and societal issues (Bosompem et al., 2024; Boulongne, 2023).

Individual's behavioral choices, beliefs and attitudes can be linked to both pro-environmental and pro-social values (Steg, De Groot, Dreijerink, Abrahamse, & Siero, 2011). Sustainable entrepreneurial values provide guide lines to address environmental challenges (Wang et al., 2021). Examination of entrepreneurship literature, scholars have found that educational background, age and gender significantly affect individual's pro social principles (Steg et al., 2011). Additionally, to pro-environmental values entrepreneurial personality is affected by social values (Wang et al., 2021). Ecological entrepreneurial behavior reflects multiple targeted behavior reflecting social responsibilities (Corbett & Montgomery, 2017). Social demand for green products can be addressed through green entrepreneurship where social dedication plays a significant role (Sharir & Lerner, 2006).

A sense of social responsibility and motivation among individuals directly influence their behavioral choices (Robichaud, McGraw, & Alain, 2001). Work values of individual reflects inspiration and motivation behind external and internal reward (Antonioli, Nicolli, Ramaciotti, & Rizzo, 2016). External reward reflects to personal interest such as pursuing a job for power, money and status, while where intrinsic reward can be related with learning, problem solving and altruistic values (Fukukawa, Shafer, & Lee, 2007). Work values guides work behavior of individuals and their attitudes towards entrepreneurial choices (Esfandiar, Sharifi-Tehrani, Pratt, & Altinay, 2019; Sargani et al., 2021). A positive mindset of individuals is closely linked with social and ecological entrepreneurial ventures (Swaney, Allen, Casillas, Hanson, & Robbins, 2012). Shapero and Sokol (1982) shows behavior and attitude of individual and entrepreneurial intentions are related. In spite of the change in attitude of an individual with time, their values are greater predictor of behavioral attributes. Furthermore, the analysis presented that the entrepreneurial value system can be better designed if the intentions of a student are known better (Harris & Gibson, 2008).

4.4. Moderator and Mediators

Scientists characterize reflection of environmental values as significant factor, worth, or importance that individuals attribute to the environment. Individuals with strong ecological qualities are more motivated to safeguard the climate (Khan et al., 2021). Such individuals have various personality characteristics, not all qualities are dependably connected with natural ways of behaving (Runco & Jaeger, 2012). It is viewed that individuals with such qualities, i.e. Self-adequacy and need for accomplishment, have greater inclination towards green business as these individuals have high natural qualities (Arru, 2020). When ecological values are strong, they enhance the relationship among these traits and green EI.

Innovative creativity is essential for sending off and fostering another endeavor (Wang et al., 2021). Research supports that entrepreneurial creativity is beneficial in shaping entrepreneurial goals (Şahin et al., 2019). In that capacity, enterprising imagination addresses the key individual distinction factor. In other words, and this component decides if an individual is reasonable for crafted by business venture. Ongoing exploration has accepted imagination as a directing variable and inferred that pioneering inventiveness would be all the more

emphatically connected with apparent individual turn out fit for ladies than men (Zahra et al., 2009). Accordingly, this research is intended to test the directing impacts of innovative inventiveness.

Innovative exploration characterizes abstract standards as a singular's view of reference individuals, like family, companions, and soul mates, who can impact the choice to turn into a business person (Vuorio et al., 2018). Relevant research has argued that EI as subjective norms and effect the green businesses practices (Dean & McMullen, 2007). Subsequently, in light of important exploration, this examination study underscores that emotional standards influence the impacts of enterprising self-viability on green pioneering expectation.

College training support assumes a basic part in supporting development and enterprising exercises, as UES can determine the circumstances and work with the ability that will advance an ascent in new green thoughts (Cohen & Winn, 2007). This support can be practically applied by keeping flow of opportunities for college understudies to put resources into investment and work with the development of green business adventures (Baron, 2006). It is fundamental that inside this untrustworthy situation, UES requires to prepare understudies for professions that characterize themselves through contributing educational programs, offices, and prompting to plan an age of green business visionaries who will establish new businesses to deliver green items (Şahin et al., 2019). This is the change expected to be shown by college schooling, a change that will patch up colleges to remake the vocations and enterprises required for manageability. Understudies request green business subjects which provide the knowledge for initiation of new business in future, and green enterprising abilities are expected to silhouette this cycle (Kumar & Bhattacharyya, 2020).

4.5. Narrative on TPB and Shapero's EEM

TPB has been utilized to characterize the proliferation of EI in young university students Ajzen (1991), and there is not exception applicable on sustainable entrepreneurial ambitions (Agu et al., 2021; Sher, Abbas, Mazhar, Azadi, & Lin, 2020; Yasir et al., 2021). According to Kumar and Bhattacharyya (2020) and Tranfield et al. (2003) a sustainable business venture differs from a traditional benefit-based one. Understudies function as problem solvers in order to become successful company leaders (Ploum, Blok, Lans, & Omta, 2018). As a result, it is critical to focus on the factors that influence students' ability to suit environmentally conscious corporate leaders. This study provides a complete model based on the TPB Ajzen (1991) to identify the aspects that motivate environmentally conscious entrepreneurs among students.

Ajzen's TPB is currently in its current state of development due to a few early aim models and consistent improvements in goal precursor display. There are two main factors that indicate how appealing the behavior is to watch: one's own inclination towards certain behaviors and the behaviors that are viewed as standard. As a result, perceived conduct control is associated with the perception of situational competence since it reflects the behavior's seeming believability. A pioneering goal Krueger Jr et al. (2000) is anticipated by the TPB technique, which has been tremendously relevant in previous entrepreneurial venture research for the purpose of explaining and foreseeing behavior (Dao et al., 2021; Haddad, Haddad, & Nagpal, 2021; Henley, 2017; Maheshwari et al., 2023).

In this particular case, visual attractiveness refers to how interested and attractive a person is in exercising responsibility in a business. Attitudes towards a behavior indicate an evaluation or judgment of the behavior, and a more positive attitude promotes a positive view of entrepreneurship. The positive attitude towards brings stronger entrepreneurial goal achievement (Fayolle et al., 2014; Fietze & Boyd, 2017; Zapkau, Schwens, Steinmetz, & Kabst, 2015). Positive entrepreneurial self-efficacy promotes a person's entrepreneurial goal of starting a business (Esfandiar et al., 2019; Fietze & Boyd, 2017; Nowiński & Haddoud,

2019). Interestingly, objective controllability refers as an individual's perspectives that they have adequate control the resources mandatory to successfully overcome a challenge. The additional positive the idea of having adequate control over resources needed to overcome the obstacles, the boost the person's expectation of pursuing a career as an entrepreneur (Fayolle et al., 2014). Affective norms, as described by Ajzen (1991) in the TPB, refer to a person's seemingly dominant belief about whether the majority will reject or support a certain behavior. A person's internal psychological system controls abstract norms as apparent general burdens to execute or not execute a behavior and may strengthen or weaken expectations (Schlaegel & Koenig, 2014). Moral conscience seems to be an external factor that influenced on how society considers a moral position to be correct. An individual's sense of moral obligation responds directly to a moral emergency after evaluating compliance with traditional customs. Moreover, assessing the extent of moral obligation requires an analysis at societal level to overcome the conflict with self-efficacy (Hockerts, 2015). Now that the top candidates for the title of the best indicator of entrepreneurial motivation have been revealed, let us move on to the field of technical analysis to see if there is anything left that serves as a suitable correlate. To be fair, the Shapero and Sokol (1982) EEM is clearly an expectation model. In EEM, the expectation of starting a business is determined by the perception of attractiveness and potential, and the tendency to pursue the opportunity. Shapero's model posits that inertia controls individual behavior until an external force disrupts or 'overturns' this inertia. Thus, an innovative opportunity requires the ability to initiate a firm (credibility and willingness to act) that exists before the initiation, and the tendency to act after a short period of time.

5. Discussion

Attitudes toward sustainability play an essential contribution within the TPB and EE Model in explaining sustainable EI (Hägg & Gabrielsson, 2020; Ndofirepi, 2022; Yasir et al., 2021). Entrepreneurship has been recognized as the main driving force of economic growth and industrialization (Hägg & Gabrielsson, 2020; Kolvereid & Isaksen, 2006; Krueger Jr et al., 2000; Wang et al., 2021). Entrepreneurship is a progression of turning an idea into business by taking risks and decision making-freedom advantages (Qazi et al., 2020; Wang et al., 2021; Zahra et al., 2009). Previous research emphasizes that any planned behavior is a result of intentions and both are deeply interlinked together (Bagozzi et al., 1989). Intentions serve as a conduit to understand human behavior Ajzen (1987), specially when individual's behavior is difficult to predict (Ajzen, 1991). There are certain personality characteristics that contributes developing entrepreneurial intentions. These characteristics include innovativeness, proactiveness, stress tolerance, thirst for achievement, internal locus of control, and enthusiasm to take risks (Nicolaou & Shane, 2009). In context of Big Five theory, the personality traits, openness, higher conscientiousness, extraversion and lower Neuroticism performs key contribution for EI (Leutner et al., 2014). Such characteristics of an entrepreneur hold great significance in the literature and are for perceptive and comprehending EI and entrepreneurial behavior (Nicolaou & Shane, 2009).

Sustainable EI is one of the techniques to meeting the SDG's almost in all seventeen goals. Furthermore, the rising empirical literature on entrepreneurial personality and behavior looks into the significance of an individual's psychological traits as important drivers of entrepreneurship. Furthermore, the mix of education, finance, and family business experience influences entrepreneurial inclinations (Anwar & Saleem, 2019). Such significant psychological characteristics may influence an individual's conduct and develop them into a successful entrepreneur. On the other hand, it is possible that these individuals with specific psychological traits do not pursue business ownership due to a lack of business information, experience, and skill.

Similarly, persons who possess attributes conducive to company success may benefit less from entrepreneurship training than those who do not have similar personality traits (Shane & Nicolaou, 2015). Many researchers regard personality traits as complex and

genetically co-determined psycho-physiological systems that impact and govern an individual, leading to certain behavior (Nicolaou & Shane, 2009). Taking this into account, personality traits are the fundamental source of behavioral and mental processes (Viinikainen et al., 2017). Individual behavior and decision-making abilities can be understood via experimental studies and theories. Characteristics are often measured based on accounts of individual's emotions, thoughts and behaviors act in various circumstances, and these specific actions are signs of true underlying reasons, may be dominated by religion, education or knowledge (Viinikainen et al., 2017). Thus, the trait openness excludes the thought of starting a private business, but it is influenced by this trait and dominant beliefs. Personality qualities may be the most important predictors of successful entrepreneurial action. A substantial and growing amount of research has found that an individual's values, beliefs, and culture influence their behavior (Rossberger, 2014).

5.1. Implication and Future Directions

Despite recent research on sustainable entrepreneurial intention literature this research identifies key drivers of sustainable EI. These mechanisms are discussed as personality, support, value mechanism. Furthermore, different moderators and mediators are discussed through the lens of TBP and Shapero and Sakool study of EEM. This research advances the research in green entrepreneurial literature by identifying different trends and supporting theoretical frameworks which can be used as a guideline for future researchers. We argue that sustainable entrepreneurial intention is a complex social phenomena and more related variables reflecting different mechanism can be further analyzed for better understanding. Random events contribute a noteworthy role in creating sustainable EI; therefore, it is highly encouraged to include factors that can be affected by the environment. Additionally, the emotional sides of antecedents are found neglected; therefore, it is highly encouraged to include emotional variables in research.

Author's Contribution:

Malik Usman: conceived the research idea, developed the scientific approach for the theoretical background, and collected and scrutinized relevant articles in line with the study objectives. He also led the writing of the results, discussion, and literature review sections.

Muhammad Usman: developed the methodology, created the conceptual framework, contributed to the literature review, served as the corresponding author, and incorporated all reviewer suggestions.

Muhammad Wasim: contributed to the literature review and translated the results.

Aymen Habib: reviewed the manuscript, wrote the introduction, and was responsible for the conclusion and policy recommendations.

Conflict of interest/ Disclosures:

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