



Entrepreneurial Intention Towards Sustainable Business

K. Subha ¹, Shivika ², Aman Behra ³, Akansha Arora ⁴

^{1,2,3,4} Xavier Institute of Management & Entrepreneurship, Bangalore, Karnataka, India.

¹ Corresponding author: subha@xime.org

© Authour (s)

OIDA International Journal of Sustainable Development, Ontario International Development Agency, Canada.

ISSN 1923-6654 (print) ISSN 1923-6662 (online) www.oidaijsd.com

Also available at <https://www.ssm.com/index.cfm/en/oida-intl-journal-sustainable-dev/>

Abstract: Purpose: Sustainable entrepreneurship intention is the entrepreneur's intention to engage in sustainable practices, develop and build new businesses that create economic, social, and environmental value. The purpose of this research is to understand the impact of various factors like attitude, social support, locus of control, and self-efficacy on sustainable entrepreneurial intention. It also assessed the moderating effect of AI self-efficacy on sustainable entrepreneurial intention.

Methodology: The researchers used descriptive, cross-sectional research design. A pilot study was conducted to validate the survey instrument adapted from the existing literature. The participants in the study are Generation Z, a generation that is highly digitally literate and very appropriate for the study of sustainable entrepreneurial intentions in a technology-enabled context. Researchers adopted a convenient sampling technique to collect data. The questionnaire was sent to 670 samples through Google form and received 212 responses. After screening 212 responses, 206 were deemed valid after dropping 6 responses for inconsistent and non-response bias.

Findings: The analysis revealed that Gen Z with a positive attitude towards sustainability, who perceive social support to a greater extent, have an internal locus of control, and possess high self-efficacy are much more inclined to develop sustainable entrepreneurial intentions. However, AI self-efficacy did not significantly alter the relationships between attitude, social support, locus of control, self-efficacy, and sustainable entrepreneurial intention. This indicates that confidence in the use of AI tools does not strengthen or weaken the psychological drivers underlying sustainable entrepreneurial intentions.

Practical Implications: Programs aimed at promoting sustainable entrepreneurship should prioritize strengthening sustainability-oriented attitudes, enhance entrepreneurial self-efficacy, and cultivate internal control beliefs. Sustainable innovation depends not only on technological advancement but also on individual responsibility orientation and confidence and hence recommend the human capital development to focus on strengthening these psychological drivers.

Keywords: AI-Self Efficacy; Attitude; Generation Z; Locus of control; Sustainable Entrepreneurial Intention

Introduction

It has been well understood that entrepreneurship is one of the most important factors in the development of the economy. However, recently its importance has increased further from being just an economically orientated feature to broader social and environmental goals. Entrepreneurs are not only viewed as wealth creators but also as important actors in the accomplishment of sustainable development in overcoming global complex issues such as climate change, natural resource depletion, and social inequality. This development gave rise to the domain of sustainable entrepreneurship, where it links business creation to profitability with long-term environmental stewardship and social responsibility. On a global basis, entrepreneurship adds value to the overall GDP, innovative capabilities, as well as employment generation, and acts as a force for inclusive growth, resilience, and sustainability (Acs et al., 2020; Bosma et al., 2021). In the post-pandemic world, there is an increasing perception that sustainability entrepreneurship is an important force in the sustainability of the economy in the long term because it considers

sustainability as the core focus rather than the edge of business practices.

Sustainable business can well be termed as a kind of business which sees equal importance in economic viability and environmental and social well-being. It has a paradigm that is future outlook-oriented, which considers the needs of the stakeholders and the future generations as well (Schaltegger et al., 2021). Sustainable entrepreneurship can be described as a process of assessing and exploiting various opportunities that result in sustainable value creation (Belz & Binder, 2020). Sustainable entrepreneurship is less visible as a paradigm compared to the traditional entrepreneurial activities. Evidence shows that although more and more people have become aware of sustainability, a remarkably small proportion of entrepreneurs have adopted sustainability as a central aim of their entrepreneurial ventures (Fichter & Tiemann, 2018). Sustainable entrepreneurship and its key drivers stand out as a field of vital importance, especially in a scenario where economic and technological change is taking place at a rapid pace.

Globally, sustainability startups are seen as a small but growing part of entrepreneurship, while developing nations, such as emerging markets, face additional challenges to do with limited support structures available for such sustainability startups to help them jump-start (Kuckertz et al., 2020). In this respect, the Indian scenario becomes much more interesting since India faces environmental degradation, inequality, and population growth challenges that make sustainability entrepreneurship not a good but a need of the day for the country as a whole. For the last decade or so, one of the fastest-growing entrepreneurship systems in the whole world has been that of India, especially after the initiation of the Startup India initiative. According to reports, as of 2024, more than 150,000 startups have been recognized to be a part of this movement, and this makes India the third-largest entrepreneurship system in the whole world (Statista, 2025). This emerging scenario is also reflected in the robust participation of India in the Asia-Pacific unicorn ecosystem, where cities like Bengaluru and Mumbai are among the Asia-Pacific's top startup ecosystem cities (Statista, 2025). Simultaneously, the interest of the investors is rapidly gravitating towards the need for more advanced technologies like artificial intelligence and data-driven innovation strategies and the sustainability-oriented sectors like clean technologies (Statista, 2025). Although these patterns indicate the growing entrepreneurial capabilities of India, there are critical concerns about the quality of these fledgling entrepreneurs, their sustainability approach, and their technological readiness for the startups they form (Basu & Virick, 2008).

Evidence from small and medium-scale businesses in the European Union reveals that being associated with sustainability is limited in most cases to basic business processes such as energy conservation and recycling or improvement in working environments and not necessarily related to product development or societal effect assessment on the sustainability parameter (Statista, 2020). Evidence from startups in Australia shows that although they mainly associate themselves with innovation and decent work and sustainable cities as their top priorities, environmental and intensive factors like climate action and consumption and production patterns are in fact given less priority (Statista, 2024). This intention action gap is even more amplified by entrepreneurial perceptions. Research in the Netherlands has revealed that most entrepreneurs consider sustainability important, yet a large number of them do not know how to turn such knowledge into doable business practices (Statista, 2018). Hence, considering all these different factors, it would seem that the main challenge of sustainable business is not that people are not willing to engage in it. Rather, it is about them not feeling sure of themselves, lacking the necessary competences, or requiring better decision-making tools.

Entrepreneurial intention has been regarded as a very reliable proxy for entrepreneurship and has been examined employing different theories such as the Theory of Planned Behavior (Schlaegel & Koenig, 2021). The major determinants that influence entrepreneurship intention are psychological and social constructs such as attitude, locus of control, support, or self-efficacy (Amofah et al., 2020). However, most of the literature still regards entrepreneurship as an economic phenomenon and does not provide much insight into sustainable entrepreneurial intentions, which are regarded in this study as the intention to create enterprises that can create value for the economy, societies, and the environment.

Moreover, despite the fact that the literature has addressed the significance of self-efficacy in the context of entrepreneurship, in particular, it has overlooked the role of Artificial Intelligence efficacy in shaping entrepreneurial intentions. This is even more surprising, given the fact that the adoption of AI is extremely widespread. However, the current literature has begun to suggest the significance of AI efficacy and the level of confidence regarding the effective use of AI in facilitating entrepreneurial endeavors as an important enabler of sustainable ventures (Dwivedi et al., 2021). Although shown to be important in this literature, AI efficacy is currently largely missing in the widely recognized models concerning entrepreneurial intentions.

Finally, current literature is constrained by a small geographical and demographic focus. Furthermore, much of the empirical literature is anchored in a certain setting thus limiting the generalisability of knowledge in different cultural

and contextual settings (Amofah et al., 2020). Moreover, very little research has been explored concerning Generation Z, which is a generation of people born with very high levels of digital literacy, social and environmental awareness, as well as increased adoption of AI technologies. This particular group of people is strategically placed in the current digitalized and sustainable economy, but little literature exists on their specific characteristics in terms of their influence on sustainable entrepreneurial intention (Basu & Virick 2008).

Against this background, the present research fills the intertwined gap by empirically investigating sustainable entrepreneurial intention through the combination of sustainability orientation and AI, efficacy as major explanatory variables in the Indian context. By looking at the ways in which core psychological characteristics combine with the trust in one's ability to use artificial intelligence to influence sustainable entrepreneurial intentions of Generation Z, the present study provides a deeper and more connected perspective on the drivers of entrepreneurship in the age of digital intelligence and sustainability challenges.

Literature Review

From Traditional to Sustainable Entrepreneurial Intentions

Although the conventional body of literature on entrepreneurship has primarily focused on economic value creation, the growing need for environmental sustainability and social responsibility has brought about a conceptual shift towards sustainable entrepreneurial intentions. Sustainable entrepreneurial intention is the mindset and commitment of an individual who is ready to establish new ventures that will create economic, social, and environmental values simultaneously (Vuorio et al., 2018). This is because the entrepreneurs of today are not only faced with the challenge of making their ventures economically profitable but also socially and environmentally responsible simultaneously by addressing various issues such as climate change and social inequality.

Recently, various studies have shown that there has been such a tremendous rise in the number of publications on sustainable entrepreneurship that the number of publications in 2022 and 2023 alone has quadrupled, showing the interest of the academic community in sustainable entrepreneurship. This has also been accompanied by the emergence of themes as new linguistic terms such as the green economy, environmental values, and university support have been common in the latest publications. Studies carried out among Generation Z and Millennials have shown an increase in awareness and social consciousness among the younger generation, making them key stakeholders in the sustainable entrepreneurship environment (Burlea-Schiopoiu & Popovici, 2024). However, despite the growing awareness of sustainability concerns, there appears to be a persistent intention-behavior gap, where positive attitudes towards sustainability protection do not always result in entrepreneurial behavior (Fichter & Tiemann, 2018). This is especially the case in the emerging economy context, where sustainability entrepreneurship is also challenged by issues of limited institutional support structures, policy ambiguity, and lack of access to funding for sustainability ventures (Kuckertz et al., 2020). In the Indian context, in particular, the need for indigenous frameworks that can instill confidence, competence, and vision among aspiring entrepreneurs has been emphasized, as opposed to merely adopting paradigms from the developed economy context (Basu & Virick, 2008).

Attitude Toward Sustainable Entrepreneurship

Attitude is an important psychological construct that has been described as an individual's evaluative disposition positive or negative toward the performance of a specific behavior (Ajzen, 1991). In the area of entrepreneurship, attitude toward entrepreneurship (ATE) may be considered a personal appraisal of the desirability and anticipated outcomes of entrepreneurship, encompassing both the affective/experiential dimensions of feelings of joy or satisfaction and the instrumental/cognitive dimensions of beliefs, thoughts, and rational arguments (Ajzen, 2002; Kolvereid, 1996). A substantial amount of empirical evidence has verified the strong predictive validity of attitude toward entrepreneurial intention, with meta-analytic results indicating strong positive effects (Armitage & Conner, 2001; Moriano et al., 2012).

In the context of sustainable entrepreneurship, attitude is of special significance as it is the link between personal values and environmental awareness and entrepreneurial behavior. Positive attitudes towards sustainability increase both the perceived desirability and feasibility of sustainable business ideas, thus improving the intentions to establish businesses that provide ecological and social as well as economic gains (Ayalew & Zeleke, 2018; Moriano et al., 2012). Recent studies on Generation Z show that this generation has high awareness of the environment, but their attitudes towards sustainable entrepreneurship are affected by individualism, with most of them giving priority to personal interests over collective goals in their career choices. Comparative studies examining traditional versus sustainable entrepreneurial intentions demonstrate significant differences. Although attitude is generally found to be one of the most prominent predictors in traditional entrepreneurship (effect sizes often $\beta = 0.45-0.50$), sustainable

entrepreneurship studies often indicate that perceived behavioral control has more prominent effects ($\beta = 0.39$), which is consistent with the increased complexity and resource requirements of sustainability-oriented ventures. This finding implies that, although positive attitudes are still a prerequisite, they are perhaps no longer sufficient in their own right.

Social Support toward Sustainable Entrepreneurship

Social support is defined as the actual availability and provision of tangible and intangible resources from an individual's social network, such as family members, friends, mentors, and community stakeholders (Mair & Noboa, 2006; Arthur & Peprah, 2024). Social support transcends mere expectations and normative pressure to provide an enabling social environment that actively encourages and fosters entrepreneurial behaviors through concrete assistance (Farooq & Salam, 2020). A study conducted on 352 graduating university students in Ghana revealed that social support has a moderate, significant positive effect on entrepreneurial intention, indicating that families and friends are capable and willing to provide assistance for the creation of ventures (Arthur & Peprah, 2024). In emerging countries such as India, where the development of institutional support structures for sustainable entrepreneurship is still in its infancy, social support in the form of family and community networks takes on special importance, albeit with limited efficacy in terms of knowledge of sustainable business models. Research on academic scientists at Chilean universities showed that social support perception affects the degree of entrepreneurial attitude and behavioral control, which has a positive indirect effect on their intention to found science-based ventures. Social support increases the effects of marshalling self-efficacy and confidence in one's ability to mobilize resources and persuade stakeholders, which in turn increases the effects of sustainable entrepreneurial intentions. Social support offers tangible help with goal setting, networking, and institutional challenges that are more apparent in sustainability-oriented start-ups. Social support offers emotional nourishment during times of uncertainty and adversity, which is especially important given the long-time horizons and low returns that are common in sustainable businesses. Research has shown that social enterprises with strong social support networks were more resilient and used their community ties to adapt business models, access emergency funding, and preserve social missions despite economic challenges.

Locus of Control towards sustainable entrepreneurship

Research has firmly established a strong positive relationship between internal locus of control and entrepreneurial intention within many different groups including students and new entrepreneurs (Arkorful et al., 2022). Recent studies have also explored how this relationship occurs, finding that internal locus of control has both a direct and an indirect impact on entrepreneurial intention. The way the two are connected is through the effect of internal locus of control on attitude, subjective norms, and perceived behavioural control towards entrepreneurship (Tseng et al., 2022). Individuals who possess a strong internal locus of control believe they can shape their world through hard work and effort; as such, they have more tenacity when faced with obstacles and greater perseverance than those who do not. According to studies, an individual's internal locus of control indirectly influences their intention to pursue a sustainable business through his/her level of entrepreneurial competence. This belief also aids in creating a sense of meaningful contributions from their own individual efforts towards creating a better world (Lopes et al., 2024). In many cases this relationship will be influenced by external factors, particularly when you have contextual issues such as policy uncertainty (in emerging economies) that can limit funding available for sustainable businesses and the overall support available via the institutions that exist to help entrepreneurs (Kuckertz et al., 2020).

Self-Efficacy toward Sustainable Entrepreneurship

Self-efficacy is a term from the social cognitive theory of Bandura that defines the belief of an individual in their ability to undertake actions or behaviors successfully. For instance, in the context of entrepreneurship, entrepreneurial self-efficacy is the confidence of an individual in their ability to undertake different tasks of entrepreneurship such as identifying business opportunities, acquiring the necessary resources, managing risks, and overcoming the challenges of entrepreneurship (Bandura, 1977). Different empirical studies have confirmed the role of entrepreneurial self-efficacy as a determinant of entrepreneurial intention, such that individuals with high self-efficacy tend to be more interested in undertaking entrepreneurial activities. Meta, analytic studies have confirmed the relationship between the two variables in different contexts, although the strength of the relationship is dependent on culture, education, and institutions. There are articles that have been published recently which try to investigate the relationship between self, efficacy and sustainable entrepreneurship; this research has led to the finding that one's belief in the use of entrepreneurial approaches to solve environmental and social problems is not only an important factor but also transcends the boundaries of entrepreneurial skills (Murugesan & Jayavelu, 2017).

When discussing self and efficacy regarding Generation Z, it is necessary to point out some characteristic features of the notion. They are well versed in digital technology and keep up with the latest trends. However, there is a gap that

has to be filled if sustainable entrepreneurship is the aim, and that is the deep knowledge of the environment, social impact, and ideas of a circular economy. The results of the previous research have demonstrated that the effect of the entrepreneurship program on self and efficacy can be paradoxical, as the confidence of students can be shaken when they understand how challenging and complex sustainable entrepreneurship is.

AI Efficacy on Sustainable Entrepreneurship

Artificial intelligence technology is evolving rapidly, and this has had a profound impact on the entrepreneurial process by creating opportunities for innovation, scalability and sustainability. AI assists entrepreneurs in making data-driven decisions, performing predictive analysis, scanning the environment and optimizing resources, all of which provide substantial benefit to entrepreneurs involved in sustainable entrepreneurship, who must weigh the trade-off between developing a viable economic model for the business against being environmentally sustainable (Dwivedi et al., 2021; Moşteanu, 2023). Increasingly, sustainability-oriented ventures are using technology to improve their operational efficiency and lessen their negative impact on the environment; therefore, having an understanding of the technologies being utilized is vital. The authors define artificial intelligence self-efficacy as the "belief that an individual has the ability to utilise AI tools for successful entrepreneurial purposes" (Duong, 2024). The empirical literature describes the potential of trust in AI to enhance entrepreneurs' perceived viability by reducing uncertainty, increasing the efficiency of information processing, and developing entrepreneurs' analytical decision-making skill sets (Lesinskis et al., 2024). Furthermore, how researchers measure their variables in this subject area tends to vary widely across the different studies; while some researchers offer more comprehensive constructs, such as AI literacy, which includes not only knowledge of AI technologies but ethics, critical analysis/analysis of AI technologies, and application skills, but also how confident the individual claims to be in their AI skills (Mostafiz et al., 2025).

A Generation of Entrepreneurs Different from the Past: Gen Z

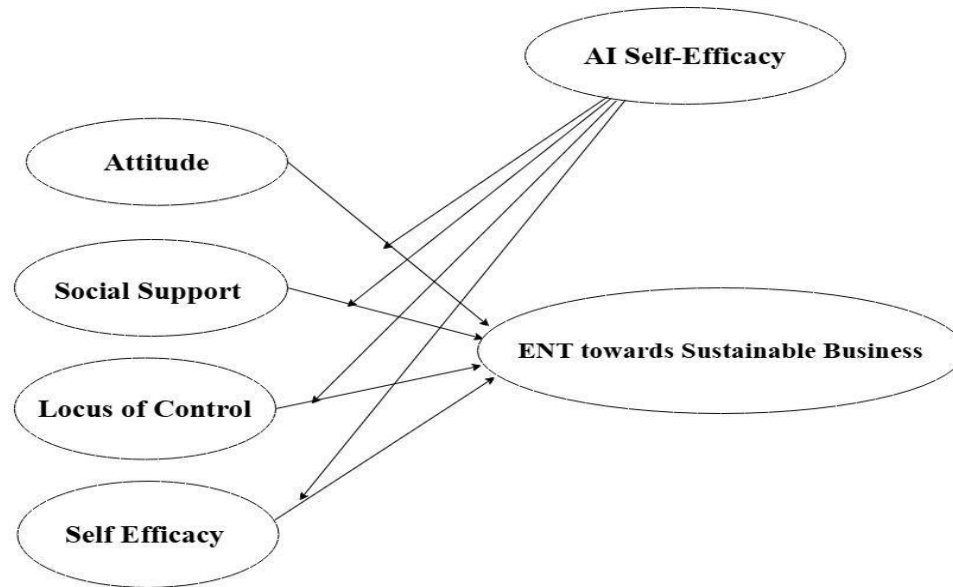
Generation Z is often defined as individuals born between 1997 and 2012 and is recognized to be an entrepreneurial cohort with a substantial awareness of sustainability that grew up with an abundance of exposure to digital environments and social media, creating a familiarity and ability to adapt to technology (Dragolea et al., 2023). According to studies, members of Generation Z tend to have a distinct entrepreneurial orientation emphasizing purpose, impact, and autonomy while balancing financial outcomes (Burlea-Schiopoiu & Popovici, 2024). Furthermore, surveys show that a significant number of entrepreneurs from Generation Z place a higher value on creating a significant social good through their business than they do on generating a high profit margin (Intuit, 2025). It has also been determined that many young entrepreneurs exhibit greater levels of stress and anxiety than older generations which could affect their ability to continue in business (Burlea-Schiopoiu & Popovici, 2024). Additionally, Generation Z appears to use fewer traditional social networks to make entrepreneurial decisions than do Millennials, therefore there is less of an impact from subjective norms and pressure from family. University support structures and entrepreneurship education have been identified as two critical external enablers of entrepreneurial confidence and intention among Generation Z by bridging the capability gap (Lopes et al., 2024).

Research Gap

However, despite the level of progress that has been achieved in the area of entrepreneurship studies, there are still some gaps that need to be filled. First, the existing body of literature on entrepreneurial intentions has mainly considered entrepreneurship as an economic activity. Second, technological capability, especially AI efficacy, is an area that has been relatively unexplored in the entrepreneurship literature, despite the revolutionary potential of AI. While literature has explored general self-efficacy, there is a need to explore the role of confidence and capability with respect to the use of AI tools and their impact on entrepreneurial cognition and behavior, especially in sustainability ventures. Third, the geographical scope of studies that have been done is limited, with many empirical studies being done in a particular context, such as European countries, providing important but geographically specific findings (Amofah et al., 2020). The cultural, institutional, and economic contexts in which entrepreneurs operate are important determinants of entrepreneurial activity, and there is a need for studies that examine how sustainable entrepreneurial intentions are formed in different emerging economy contexts. Fourth, limited research has focused specifically on Generation Z's entrepreneurial dynamics. While studies have examined mixed or adult samples, there is insufficient understanding of how Gen Z's unique characteristics digital literacy, social responsibility, innovation inclination, and independence from traditional social networks shape their entrepreneurial conduct and sustainable venture creation intentions (Basu & Virick 2008). The current research fills these gaps in the literature by proposing and testing an extended Theory of Planned Behavior framework that incorporates AI self-efficacy as a moderator and sustainability orientation as an outcome variable. From the point of view of understanding the role of more traditional psychological variables (attitude, locus of control, social support, self-efficacy) combined with technological expertise

(AI self-efficacy) in shaping sustainable entrepreneurial intentions among Generation Z in India, the current research hopes to provide a more integrated and complex perspective on entrepreneurship in the age of artificial intelligence and sustainability.

Figure 1: Proposed conceptual framework of the study.



Methodology

The research design employed for this study was quantitative and cross-sectional. One of the main objectives of the quantitative approach is that it enables objective measurement and statistical data analysis, which enhances the reliability and generalizability of the research findings. Cross-sectional study helps the researcher to identify the existing trends and patterns in a cost-effective manner. However, quantitative research design overlooks the subjective insights that could be captured through the qualitative approach, and cross-sectional can not establish a causal relation as the data is collected at a single point in time. The researcher has considered quantitative and cross-sectional study as appropriate since it is most appropriate for researching perceptual and intention-based variables at a single point in time.

The data was collected through a non-probability convenience sampling technique, which is most appropriate in entrepreneurship research where the respondents are geographically dispersed and a complete sampling frame is not available (Amofah et al., 2020). The online survey was conducted across different regions in India. The sample size of the study is 206. The questionnaire was sent to 670 samples through Google form and received 212 responses, out of which 206 were deemed valid. Based on the inconsistency in response and incomplete entries, 6 responses were dropped. The sample size was determined based on the number of items in the questionnaire. The questionnaire comprised 33 items, suggesting a minimum sample size of 165 respondents based on the commonly accepted rule of thumb in multivariate analysis in the ratio of 1:5. However, 206 valid responses received through the Google Form survey exceeded the minimum recommended requirement.

The structured questionnaire was developed to measure attitude, social support, locus of control, self-efficacy, sustainable entrepreneurial intention, sustainability orientation, and AI self-efficacy. The scales used for the measurement were adapted from the existing literature and were relevant to the study of sustainable entrepreneurship. All the items were measured on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A pilot study was conducted before the actual data collection to ensure the items in the questionnaire were clear, relevant, and reliable. The participants in the study belonged to Generation Z, a generation that is highly digitally literate and very appropriate for the study of sustainable entrepreneurial intentions in a technology-enabled context.

The analysis of the data was done using Partial Least Squares Structural Equation Modelling (PLS-SEM) in SmartPLS due to its appropriateness for predictive research involving multiple latent variables and moderation analysis (Hair et al., 2019). Before the analysis of the structural model, the measurement model was assessed for reliability and validity.

The reliability of the indicators was assessed by the evaluation of the outer loadings, and those with low values were deleted. This included items AT1 - Being an entrepreneur implies more advantages than disadvantages to me and AT5 - Among various options, I would rather be an entrepreneur; for the Attitude construct, as well as items SP2 - The approval from my colleagues or classmates and SP3 - The approval from my friends is important to me; for the Social Support construct. The loadings for the rest of the indicators were of acceptable value. Internal consistency reliability, as measured by Cronbach's Alpha and Composite Reliability, was above the recommended 0.70. Convergent validity was established by Average Variance Extracted values above 0.50, while discriminant validity was established by the application of standard criteria.

Common method bias refers (CMB) to assessing bias that arise from methodological issues. For instance, from the measuring instrument or the respondent's related effects. Using a common measurement tool with a 5-point Likert Scale for all the survey questions may lead to common method bias (Podsakoff et al., 2003). Harman's Single Factor test was used to assess the CMB. We performed unrotated exploratory analysis using the 29 items loading on one factor. The average variance explained by the single factor is only 29.81, which is well below the recommended 50% cutoff, suggesting that common method variance did not threaten the validity of the data collected through the survey.

Data Analysis

The data were analyzed using PLS, SEM in SmartPLS where the researchers followed a two step approach involving measurement model assessment and structural model evaluation. The construct's reliability and validity were first confirmed before the researchers tested the hypothesized relationships among Attitude, Social Support, Locus of control, Self-Efficacy, AI Self- Efficacy, and Sustainable Entrepreneurial Intention. Internal consistency was evaluated through Cronbach's alpha and composite reliability, with convergent reliability being supported by good factor loadings of the indicators. Discriminant validity was checked by applying the Fornell & Larcker criterion to confirm that the constructs are different from each other.

After that, the structural model was examined by using bootstrapping which helped to estimate the path coefficients and their significance. Model explanatory power was checked using R, where Sustainable Entrepreneurial Intention demonstrated a moderate level of variance explained (R 0.449) indicating that the model only explains about half of the variance. The model thus provides a significant explanation of SEI, however, the remaining unexplained variance points to the possibility of other factors which might improve the model's explanatory power. The study looked at the direct effects of the psychological variables as well as the indirect effects through AI Self-efficacy functioning as a moderator.

Reliability & Validity

Table 1: Measurement Items and Factor Loadings

Constructs and their respective items	Factor Loadings
AI Self-Efficacy: $\alpha = 0.862$, CR= 0.87, AVE=0.706	
AISE 1	0.856
AISE 2	0.866
AISE 3	0.821
AISE 4	0.817
Attitude: $\alpha = 0.813$, CR= 0.814, AVE= 0.728	
AT 2	0.845
AT 3	0.865

AT 4	0.849
Social Support: $\alpha=0.667$, CR= 0.676, AVE= 0.495	
SP 1	0.655
SP 4	0.645
SP 5	0.77
SP 6	0.738
Locus of control: $\alpha=0.818$, CR= 0.839, AVE= 0.576	
LOC 1	0.702
LOC 2	0.737
LOC 3	0.744
LOC 4	0.74
LOC 5	0.836
Self-Efficacy: $\alpha=0.764$, CR= 0.801, AVE= 0.58	
SF 1	0.673
SF 2	0.795
SF 3	0.749
SF 4	0.82
Sustainable Entrepreneurial Intention: $\alpha=0.869$, CR= 0.874, AVE=0.657	
SEI 1	0.806
SEI 2	0.838
SEI 3	0.829
SEI 4	0.747
SEI 5	0.827

Table 1 displays the constructs, their measurement items, and the factor loadings obtained from PLS measurement model. The study reached an acceptable level of internal consistency because all measured constructs showed Cronbach's alpha and composite reliability values that exceeded the 0.70 threshold. The current research found that

indicator loadings reached values from 0.645 to 0.866 which satisfied the PLS-SEM measurement model standards established by Hair et al. 2019. Convergent validity was met as the construct AVE values exceeded 0.50, as suggested for the majority of constructs by Fornell & Larcker. The AVE value for Social Support was slightly under the suggested limit, however, its composite reliability was greater than 0.70, which shows sufficient convergent validity. The testing of the measurement model revealed good reliability and validity and thus is appropriate to support an analysis of the structure.

Table 2: Discriminant Validity Analysis

	AI Self-Efficacy	Attitude	Locus of Control	Self Efficacy	Social Support	Sustainable Entrepreneurial Intention
AI Self Efficacy	0.84					
Attitude	0.438	0.853				
Locus of Control	0.442	0.404	0.759			
Self Efficacy	0.376	0.315	0.354	0.761		
Social Support	0.378	0.26	0.37	0.352	0.704	
Sustainable Entrepreneurial Intention	0.447	0.493	0.506	0.461	0.426	0.81

As can be observed in Table 2 that shows the discriminant validity results based on the Fornell & Larcker criterion. Diagonal entries are the square root of the AVE for each construct, and they are greater than the off, diagonal elements which show the correlations between constructs, thus proving that discriminant validity is complete. Perhaps AI Self-Efficacy, Attitude, Locus of Control, Self Efficacy, Social Support, and Sustainable Entrepreneurial Intention are distinctly different constructs in this empirical study. Consequently, the measurement model shows good discriminant validity and is suitable for further structural model analysis.

Next page

Figure 2: SEM path diagram

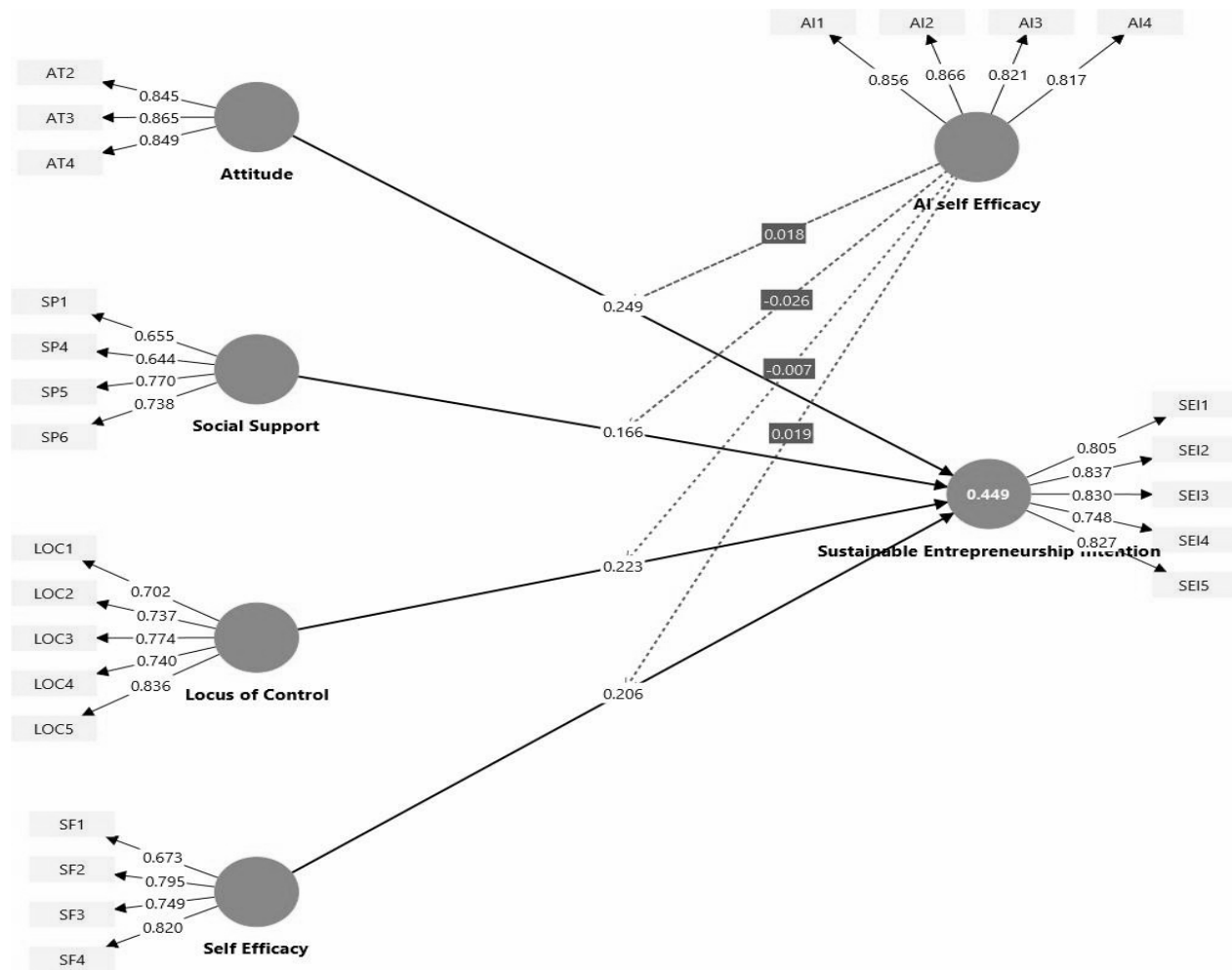


Figure 2 shows the PLS, SEM path diagram depicting the latent constructs, their observed indicators, and the relationships among them. Direct effects on Sustainable Entrepreneurial Intention are represented by solid arrows, whereas dashed arrows indicate moderating effects through AI Self-Efficacy. The model displays standardized path coefficients and the explained variance ($R = 0.449$).

Results

This section presents important findings from the analytical epithesis to check the hypotheses presented. The study results tested with statistical methods which include path coefficients and t values and p values show which variable connections in the study have statistical significance. The research results explain how psychological factors impact sustainable entrepreneurial intention through their mechanisms while demonstrating how AI self-efficacy functions within the entire theoretical framework.

Table 3: Summary of hypothesis testing

HYPOTHESIS	Coefficient (β)	T-Value	P-Value	Decision
H1: AT $\rightarrow$ SEI	0.249	2.533	0.011	Supported
H2: SP $\rightarrow$ SEI	0.166	2.539	0.011	Supported
H3: LOC $\rightarrow$ SEI	0.223	2.565	0.010	Supported
H4: SF $\rightarrow$ SEI	0.206	2.760	0.006	Supported
H5: AISE x AT $\rightarrow$ SEI	0.018	0.216	0.829	Not Supported
H6: AISE x SS $\rightarrow$ SEI	-0.026	0.431	0.667	Not Supported
H7: AISE x LOC $\rightarrow$ SE	-0.007	0.100	0.921	Not supported
H8: AISE x SE $\rightarrow$ SEI	0.019	0.226	0.822	Not Supported

The hypothesis test revealed that psychological factors indeed significantly influence Sustainable Entrepreneurial Intentions (SEI). The data confirms the first four hypotheses H1 to H4 as the variables AT ($\beta = 0.249$, $p = 0.011$), SS ($\beta = 0.166$, $p = 0.011$), LOC ($\beta = 0.223$, $p = 0.010$), and SE ($\beta = 0.206$, $p = 0.006$) have demonstrated significant positive impacts and have been subjected to rigorous tests concerning their links with SEI.

According to the findings, individuals who have a positive attitude towards sustainability, perceive social support to a greater extent, have an internal locus of control, and possess high self-efficacy are much more inclined to develop sustainable entrepreneurial intentions. On the other hand, interaction effects for AI Self-Efficacy (AISE) were not at all statistically significant. H5 (AISE x AT $\rightarrow$ SEI) is not supported, as per the results ($\beta = 0.018$, $p = 0.829$). Likewise, the results that were obtained did not supported H6 (AISE x SS $\rightarrow$ SEI) ($\beta = 0.026$, $p = 0.667$), H7 (AISE x LOC $\rightarrow$ SEI) ($\beta = 0.007$, $p = 0.921$), and H8 (AISE x SE $\rightarrow$ SEI) ($\beta = 0.019$, $p = 0.822$) as the p-values for all four hypotheses are above 0.05. Therefore, we can conclude that the impact of AI self-efficacy in changing the connections between the psychological factors and sustainable entrepreneurial intentions is almost negligible.

Discussion

The results confirm that there is a significant relationship between positive attitudes towards sustainable entrepreneurship and intentions to become involved in such businesses (Vuorio et al., 2018; Moriano et al., 2012). People with positive attitudes towards sustainable entrepreneurship are generally much more likely to be committed to sustainable businesses than people who don't have those same attitudes. This finding supports the existing literature

that has demonstrated a strong relationship between entrepreneurs' positive attitudes towards entrepreneurship and the likelihood that they will pursue entrepreneurial opportunities (Armitage & Conner, 2001; Schlaegel & Koenig, 2021). The second hypothesis is also supported, which means that social support positively contributes to sustainable entrepreneurial intention (Arthur & Peprah, 2024). Social support from family, friends, and significant others decreases perceived uncertainty and legitimates entrepreneurial choices. For Generation Z, entrepreneurial choices might increasingly be influenced by personal values and access to various digital sources of information, rather than being dependent only on social validation. In emerging economies like India, social networks might also have limited exposure to sustainable models of entrepreneurship, which might restrict the extent of in-depth support offered (Kuckertz et al., 2020).

The support for the third hypothesis shows that internal locus of control has a positive impact on sustainable entrepreneurial intention (Arkorful et al., 2021). People who believe that the outcomes are dependent on their own actions and efforts are more likely to pursue sustainability entrepreneurship. Sustainability ventures may involve complex societal and environmental issues that require a high degree of responsibility (Fichter & Tiemann, 2018). The fourth hypothesis is confirmed, and it states that entrepreneurial self-efficacy has a positive effect on sustainable entrepreneurial intention. People who feel they have the ability to establish and run a business are more likely to make sustainable entrepreneurial commitments. Sustainable entrepreneurship requires not only business skills but also the confidence to deal with environmental and social issues (Belz & Binder, 2020; Schaltegger et al., 2021). The results indicate that entrepreneurial confidence continues to play a pivotal role in sustainable entrepreneurial intention formation.

AI self-efficacy did not significantly alter the relationships between attitude, social support, locus of control, self-efficacy, and sustainable entrepreneurial intention. This indicates that confidence in the use of artificial intelligence tools does not strengthen or weaken the psychological drivers underlying sustainable entrepreneurial intention (Dwivedi et al., 2021). The absence of moderating effects suggests that technological confidence does not amplify motivational determinants at the intention formation stage. While artificial intelligence may be strategically relevant for innovation, optimization, or venture execution (Dwivedi et al., 2021), it does not appear to condition the cognitive processes that lead individuals to commit to sustainability-oriented entrepreneurship. Intention formation in this context remains primarily grounded in human-centered psychological constructs rather than technological self-confidence. These findings imply that, within the Indian Generation Z context examined in this study, sustainable entrepreneurial intention is shaped predominantly by internal evaluations and perceived personal capability rather than digital technological assurance. AI-related competence does not operate as a catalyst that magnifies psychological motivation toward sustainable venture creation.

Conclusion

This study examined the determinants of sustainable entrepreneurial intention among Generation Z in India by assessing the influence of attitude, social support, locus of control, and entrepreneurial self-efficacy, along with the moderating role of AI self-efficacy. The questionnaire was drafted based on the review of literature and further validated the scale using Cronbach's alpha and construct validity assessments. A pilot study was done with 30 respondents to ensure that the questionnaire was worded clearly without ambiguity and to avoid leading and double barrel questions. During data collection, the researchers ensured anonymity to reduce the social desirability bias and to enhance the honest response. The data collected was screened to check for inconsistent responses, missing values and outliers before proceeding for the data analysis. Further to strengthen the credibility of the findings and to mitigate the internal bias, the statistical assessment of Harman's single factor test was conducted. The average variance extracted score of the Harman's single factor test was well below the cutoff of 50% proving the validity of the data collected through the questionnaire. The findings demonstrate that sustainable entrepreneurial intention is significantly influenced by psychological determinants. Individuals who possess favorable evaluations toward sustainability, strong internal control beliefs, perceived social encouragement, and confidence in entrepreneurial capability are more likely to develop commitment toward sustainability-oriented ventures. Confidence in the ability to use artificial intelligence tools does not strengthen or alter the impact of psychological antecedents on intention formation. This suggests that technological self-confidence does not condition sustainable entrepreneurial commitment at the pre-venture stage. Sustainable entrepreneurial intention remains predominantly human-driven and psychologically grounded. Artificial intelligence may serve as an operational resource during venture implementation, but it does not modify the motivational foundations that lead individuals to intend sustainable entrepreneurship.

Implications For Educators

The findings provide important implications for entrepreneurship educators, incubators, and policymakers. Programs

aimed at promoting sustainable entrepreneurship should prioritize strengthening sustainability-oriented attitudes, enhancing entrepreneurial self-efficacy, and cultivating internal control beliefs. Experiential learning models, sustainability-focused training, and mentorship initiatives are likely to be more effective in stimulating sustainable entrepreneurial intentions than purely technology-centered training programs. Startup ecosystems should focus on psychological empowerment and capability development rather than assuming that AI proficiency alone will increase sustainable venture creation. While digital competencies remain valuable for execution and scalability, they do not substitute for motivational readiness.

Societal Implications

From a societal perspective, the study highlights the importance of human capital development in addressing environmental and social challenges through entrepreneurship. Sustainable innovation depends not only on technological advancement but also on individual responsibility orientation and confidence. Policymakers seeking to foster sustainable entrepreneurship in emerging economies should design integrated support systems that combine psychological development with structural and technological resources.

Limitations

This study is subject to several limitations. The cross-sectional research design limits causal interpretation of the observed relationships. The use of non-probability convenience sampling restricts the generalizability of findings beyond the sampled population. The focus on Generation Z respondents within the Indian context limits cross-cultural applicability. Additionally, AI self-efficacy was measured as perceived confidence rather than objective technological competence, which may influence interpretation.

Scope for Future Research

Future studies may adopt longitudinal designs to examine the progression from sustainable entrepreneurial intention to actual venture creation. Comparative cross-country research may provide deeper contextual insights into the role of technological capability. Researchers may also explore alternative constructs such as AI literacy, technology integration readiness, or digital entrepreneurial capability to assess whether different operationalizations yield stronger moderating effects. Further investigation into mediation mechanisms could help identify the stage at which technological competence becomes strategically relevant in the sustainable entrepreneurship process.

References

1. Acs, Z. J., Stam, E., Audretsch, D. B., & O'Connor, A. (2017). The lineages of the entrepreneurial ecosystem approach. *Small business economics*, 49(1), 1-10. DOI 10.1007/s11187-017-9864-8
2. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
3. Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32(4), 665-683. <https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
4. Amofah, K., Saladrighes, R., & Akwaa-Sekyi, E. K. (2020). Entrepreneurial intentions among MBA students. *Cogent Business & Management*, 7(1), 1832401. <https://doi.org/10.1080/23311975.2020.1832401>
5. Arkorful, H., & Hilton, S. K. (2022). Locus of control and entrepreneurial intention: a study in a developing economy. *Journal of Economic and Administrative Sciences*, 38(2), 333-344. <https://doi.org/10.1108/JEAS-04-2020-0051>
6. Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British journal of social psychology*, 40(4), 471-499.
7. Arthur, S., & Peprah, W. K. (2024). Correlation between social support and entrepreneurial intentions: Evidence from private and public universities in Ghana. *Pan-African Journal of Education and Social Sciences*, 5(1), 71-86. <https://orcid.org/0000-0002-6802-2586>
8. Ayalew, M. M., & Zeleke, S. A. (2018). Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia. *Journal of Innovation and Entrepreneurship*, 7(1), 8. <https://doi.org/10.1186/s13731-018-0088-1>
9. Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.

10. Basu, A., & Virick, M. (2008). Assessing entrepreneurial intentions amongst students: A comparative study. In *VentureWell. Proceedings of Open, the Annual Conference* (p. 79). National Collegiate Inventors & Innovators Alliance.
11. Belz, F. M., & Binder, J. K. (2017). Sustainable entrepreneurship: A convergent process model. *Business strategy and the environment*, 26(1), 1-17. <https://doi.org/10.1002/bse.1887>
12. Bosma, N., Hill, S., Ionescu-Somers, A., Kelly, D., Guerrero, M., & Schott, T. (2021). Global entrepreneurship monitor 2020/2021 global report.
13. Burlea-Schiopoiu, A., & Popovici, N. (2024). Social inclusion: A factor that influences the sustainable entrepreneurial behavior of generation Z. *Administrative Sciences*, 14(3), 59. <https://doi.org/10.3390/admsci14030059>
14. Dragolea, L. L., Butnaru, G. I., Kot, S., Zamfir, C. G., Nuță, A. C., Nuță, F. M., & Ștefănică, M. (2023). Determining factors in shaping the sustainable behavior of the generation Z consumer. *Frontiers in Environmental Science*, 11, 1096183. <https://doi.org/10.3389/fenvs.2023.1096183>
15. Duong, N. H., Tran, K. L., Do, B. N., & Duong, T. T. Q. (2024). The Relationship between Students' Perceptions of AI Applications and Intention to Use, Mediating Role of Satisfaction. In *The 2nd International Conference: Resiliency by Technology and Design (RTD 2024)* (pp. 245-271). Atlantis Press. https://doi.org/10.2991/978-94-6463-583-6_12
16. Dwivedi, Y. K., Hughes, D. L., Ismagilova, E., et al. (2021). Artificial intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research. *International Journal of Information Management*, 57, 101994. [10.1016/j.ijinfomgt.2019.08.002](https://doi.org/10.1016/j.ijinfomgt.2019.08.002)
17. Farooq, M. S., & Salam, M. (2020). Nexus between CSR and DSIW: a PLS-SEM approach. *International Journal of Hospitality Management*, 86, 102437. <https://doi.org/10.1016/j.ijhm.2019.102437>
18. Fichter, K., & Tiemann, I. (2018). Factors influencing university support for sustainable entrepreneurship: Insights from explorative case studies. *Journal of Cleaner Production*, 175, 512-524. [10.1016/j.jclepro.2017.12.031](https://doi.org/10.1016/j.jclepro.2017.12.031)
19. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
20. Kolvereid, L. (1996). Prediction of employment status choice intentions. *Entrepreneurship Theory and practice*, 21(1), 47-58. <https://doi.org/10.1177/104225879602100104>
21. Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Reyes, C. A. M., Prochotta, A., & Berger, E. S. (2020). Startups in times of crisis—A rapid response to the COVID-19 pandemic. *Journal of business venturing insights*, 13, e00169. <https://doi.org/10.1016/j.jbvi.2020.e00169>
22. Lesinskas, K. R. I. S. T. A. P. S., Mavlutova, I. N. E. S. E., & Hermanis, J. A. N. I. S. (2025). The emergence and significance of artificial intelligence in digital tools for entrepreneurship education. *WSEAS Transactions on Environment and Development*, 21, 1160-1167. DOI: 10.37394/232015.2025.21.97
23. Lopes, J. M., Gomes, S., & Trancoso, T. (2024). From risk to reward: understanding the influence of Generation Z and personality factors on sustainable entrepreneurial behaviour. *FIIB Business Review*, 23197145241271467. <https://doi.org/10.1177/23197145241271467>
24. Mair, J., & Noboa, E. (2006). Social entrepreneurship: How intentions to create a social venture are formed. In *Social entrepreneurship* (pp. 121-135). London: Palgrave Macmillan UK.
25. Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of career development*, 39(2), 162-185. <https://doi.org/10.1177/0894845310384481>
26. Mostafiz, M. I., Ahmed, F. U., Ahammad, M. F., & Rahman, P. N. A. (2025). Entrepreneurial Cognition and Artificial Intelligence Adoption—Contingency Role of Innovation Ecosystem Resource Mobilization and Entrepreneurial Bricolage. *R&D Management*, 55(5), 1754-1772. <https://doi.org/10.1111/radm.12781>
27. Moșteanu, N. R. (2023). Navigating the intersection of sustainability and intelligent automation: Opportunities and challenges for entrepreneurs. *Human Resources Management and Services*, 5(2), 3360-3360. <https://doi.org/10.18282/hrms.v5i2.3360>
28. Murugesan, R., & Jayavelu, R. O. E. N. T. G. E. N. (2017). The influence of big five personality traits and self-efficacy on entrepreneurial intention: The role of gender. *Journal of entrepreneurship and innovation in emerging economies*, 3(1), 41-61. <https://doi.org/10.1177/239395751668456>

29. Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879. 10.1037/0021-9010.88.5.879
30. Schaltegger, S., Hansen, E. G., & Lüdeke-Freund, F. (2016). Business models for sustainability: Origins, present research, and future avenues. *Organization & environment*, 29(1), 3-10.
<https://doi.org/10.1177/1086026615599806>
31. Schlaegel, C., & Koenig, M. (2014). Determinants of entrepreneurial intent: A meta-analytic test and integration of competing models. *Entrepreneurship theory and practice*, 38(2), 291-332.
<https://doi.org/10.1111/etap.12087>
32. Statista. (2018). Entrepreneurs' perceptions of sustainability in the Netherlands. Retrieved from <https://www.statista.com>
33. Statista. (2020). Sustainability practices among SMEs in the European Union. Retrieved from <https://www.statista.com>
34. Statista. (2024). Startup sustainability priorities worldwide. Retrieved from <https://www.statista.com>
35. Statista. (2025). Number of startups in India. Retrieved from <https://www.statista.com>
36. Tseng, T. H., Wang, Y. M., Lin, H. H., Lin, S. J., Wang, Y. S., & Tsai, T. H. (2022). Relationships between locus of control, theory of planned behavior, and cyber entrepreneurial intention: The moderating role of cyber entrepreneurship education. *The International Journal of Management Education*, 20(3), 100682.
[10.1016/j.ijme.2022.100682](https://doi.org/10.1016/j.ijme.2022.100682)
38. Vuorio, A. M., Puumalainen, K., & Fellnhofer, K. (2018). Drivers of entrepreneurial intentions in sustainable entrepreneurship. *International Journal of Entrepreneurial Behavior & Research*, 24(2), 359-381. <https://doi.org/10.1108/IJEBr-03-2016-0097>

Authors Bio:

Author 1:

Dr. K. Subha is a Sr Asst Professor in HRM & OB. She has undergone advanced training in pedagogy and research methods at the Indian Institute of Management, Ahmedabad, and brings over two decades of rich academic experience teaching undergraduate and postgraduate students. Dr. Subha has published research articles in ABDC- and Scopus-indexed journals. Her teaching and research interests lie in Organizational Behaviour, HRM, HR Analytics, Talent Management and Sustainable business.

Author 2:

Shivika has graduated from XIME Bangalore with a PGDM degree. She worked on HR analytics, AI-driven HR initiatives, and process automation during her internship at Intel. Her research interests include sustainable entrepreneurship, business culture, organizational relationships, the psychological impact of work on employees, and the role of AI in modern workplaces.

Author 3:

Aman Behra is a PGDM graduate from XIME Bangalore with an interest in sustainable entrepreneurship, artificial intelligence, and entrepreneurial intention. His current research explores how AI and psychological factors shape sustainable entrepreneurial intentions among Generation Z in India, especially in relation to technology and socially responsible business practices.

Author 4:

Akansha Arora is a PGDM graduate from XIME Bangalore with research interests in sustainable business innovation, entrepreneurship education, youth entrepreneurial mindset, and the role of psychological factors in venture creation. Her work explores how changing social, economic, and institutional environments influence entrepreneurial aspirations and sustainability-focused decision-making among Generation Z.

