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Entrepreneurial Mindset Dimensions as Drivers of Sustainable Business Innovation: A Structural Analysis Among Business and Accountancy Students

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ABSTRACT

The increasing emphasis on sustainable business practices underscores the importance of an entrepreneurial mindset in fostering innovation among emerging business leaders. Guided by Entrepreneurial Mindset Theory, which emphasizes opportunity recognition, creativity, risk-taking, proactiveness, and resilience, and framed by Schumpeter's Theory of Innovation, which proposes that innovation arises from individuals introducing new combinations of products, processes, or markets, this study investigates how specific entrepreneurial mindset dimensions influence sustainable business innovation. Using a quantitative research design, data were collected from a sample of 236 students enrolled in the *Entrepreneurial Mind* subject during the Academic Year 2025–2026 at selected universities in Manila, Bulacan, and Cavite. Structured surveys assessed students' entrepreneurial mindset traits alongside their engagement in sustainable innovation activities. Multiple regression analysis was employed to determine the predictive influence of each mindset dimension on sustainable business innovation outcomes. The results indicate that opportunity recognition, creativity, and proactiveness serve as strong predictors of sustainable innovation, while risk-taking and resilience exhibit moderate but statistically meaningful effects. These findings suggest that deliberately developing these entrepreneurial mindset traits can enhance students' capacity to generate innovative solutions that balance economic viability with environmental and social sustainability. The study underscores the importance of curriculum enhancements, targeted entrepreneurial training, and experiential learning opportunities to cultivate these competencies among future business professionals. By identifying which dimensions of the entrepreneurial mindset most strongly influence sustainable innovation, the research contributes to both theoretical understanding and practical strategies, equipping emerging leaders to implement innovation-driven, sustainability-focused initiatives in business environments that increasingly demand responsible and forward-thinking approaches.

Keywords: *Entrepreneurial mindset, sustainable business innovation, business students, opportunity recognition*

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INTRODUCTION

Entrepreneurial mindset has become a critical determinant of innovation, shaping how individuals identify opportunities, take risks, and respond proactively to dynamic business challenges (Vinsensius & Ryandra, 2024; González-Prida et al., 2024). Among university students, developing an entrepreneurial mindset is essential not only for pursuing entrepreneurial ventures but also for generating sustainable business solutions that balance economic, social, and environmental considerations (Tang et al., 2024). Sustainable business innovation integrates traditional business innovation with long-term societal and environmental value, emphasizing the need for cognitive and behavioral competencies that enable students to design innovative and responsible solutions.

Despite growing interest, most research has focused on entrepreneurial mindset in relation to entrepreneurial intention or general innovation, with limited empirical evidence on how specific dimensions opportunity recognition, creativity, risk-taking, resilience, and proactiveness drive sustainable business innovation (Su et al., 2021; Zemlyak, 2022). This represents a significant research gap, particularly within higher education contexts, where curriculum and training programs aim to cultivate sustainability-oriented entrepreneurial competencies. Addressing this gap can guide curriculum design, experiential learning, and targeted training initiatives to strengthen students' capacity for sustainable innovation.

This study aims to examine the relationships between entrepreneurial mindset dimensions and sustainable business innovation among business and accountancy students at Bulacan University. Specifically, it seeks to identify the extent to which students exhibit key dimensions of the entrepreneurial mindset, determine the influence of each dimension on sustainable innovation, and identify which traits are the strongest drivers of sustainability-focused business innovation. By doing so, the study contributes to understanding how entrepreneurial cognition supports sustainable innovation and provides practical insights for enhancing entrepreneurship education in higher education institutions.

Sustainable business innovation has become a priority in both academic and professional settings. Organizations are expected to design solutions that generate profit while also addressing environmental and social concerns. This dual responsibility requires future business leaders to develop specific cognitive and behavioral traits that support responsible innovation (Leal Filho et al., 2024). The entrepreneurial mindset provides a useful framework for understanding these traits. It includes opportunity recognition, creativity, risk-taking, resilience, and proactiveness. Entrepreneurial Mindset Theory explains how these dimensions shape the way individuals identify and act on opportunities (Naumann, 2017; Kuratko, Fisher, & Audretsch, 2020). Schumpeter's Theory of Innovation further emphasizes that innovation arises when individuals introduce new combinations of products, processes, or markets (Schumpeter, 1934; Sweezy, 1943). Together, these theories highlight the role of entrepreneurial thinking in driving sustainable innovation.

Higher education institutions play a central role in cultivating these competencies. Business and accountancy students are trained in financial management, marketing, and compliance, but they also need exposure to sustainability-oriented practices. Early adulthood, the stage when most students are enrolled, is a critical period for developing career intentions and cognitive flexibility. Their familiarity with digital technologies and growing awareness of sustainability issues may strengthen their ability to recognize

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opportunities and design innovative solutions (Valencia-Arias et al., 2025). Despite this potential, most existing research has focused on entrepreneurial mindset in relation to entrepreneurial intention or general innovation. Few studies have examined how specific dimensions of the mindset influence sustainable business innovation outcomes (Daspit, Fox, & Findley, 2014). This gap is significant because universities aim to prepare students not only for entrepreneurial ventures but also for leadership roles in organizations that demand responsible and forward-thinking approaches.

This study addresses that gap by analyzing how entrepreneurial mindset dimensions drive sustainable business innovation among business and accountancy students. By identifying which traits most strongly predict sustainability-focused innovation, the research provides evidence that can guide curriculum design, experiential learning, and targeted training programs. Strengthening these areas may help institutions equip students with the competencies needed to contribute to sustainable business development.

Grounded in entrepreneurial mindset and innovation theories, this study examined how entrepreneurial mindset dimensions influence sustainable business innovation among business and accountancy students in higher education institutions. It identified key traits such as opportunity recognition, creativity, risk-taking, resilience, and proactiveness, and analyzed their relationship with sustainability-focused innovation outcomes. The study also evaluated the relevance of Schumpeter's Theory of Innovation and Entrepreneurial Mindset Theory, as well as the role of digital technology familiarity and sustainability awareness in enhancing responsible innovation. Finally, it determined the strongest predictors of sustainable innovation and proposed recommendations for curriculum design and training to strengthen sustainability-driven entrepreneurial competencies.

Research Questions

This study investigates how entrepreneurial mindset dimensions drive sustainable business innovation among Business and Accountancy students. Specifically, it aims to answer the following research questions:

1. What is the demographic profile of the respondents in terms of:
   1.1. age,
   1.2. gender,
   1.3. course,
   1.4. year level, and
   1.5. Prior entrepreneurial exposure?
2. How are the dimensions of entrepreneurial mindset perceived by Business and Accountancy students in terms of:
   2.1. Opportunity recognition,
   2.2. Risk-taking
   2.3. Creativity/Innovation
   2.4. Resilience
   2.5. Proactiveness
   2.6. Self-Efficacy
3. What is the level of sustainable business innovation among these students, in terms:
   3.1. Introduction of a new product
   3.2. Introduction of a new method of production
   3.3. Opening of a new market

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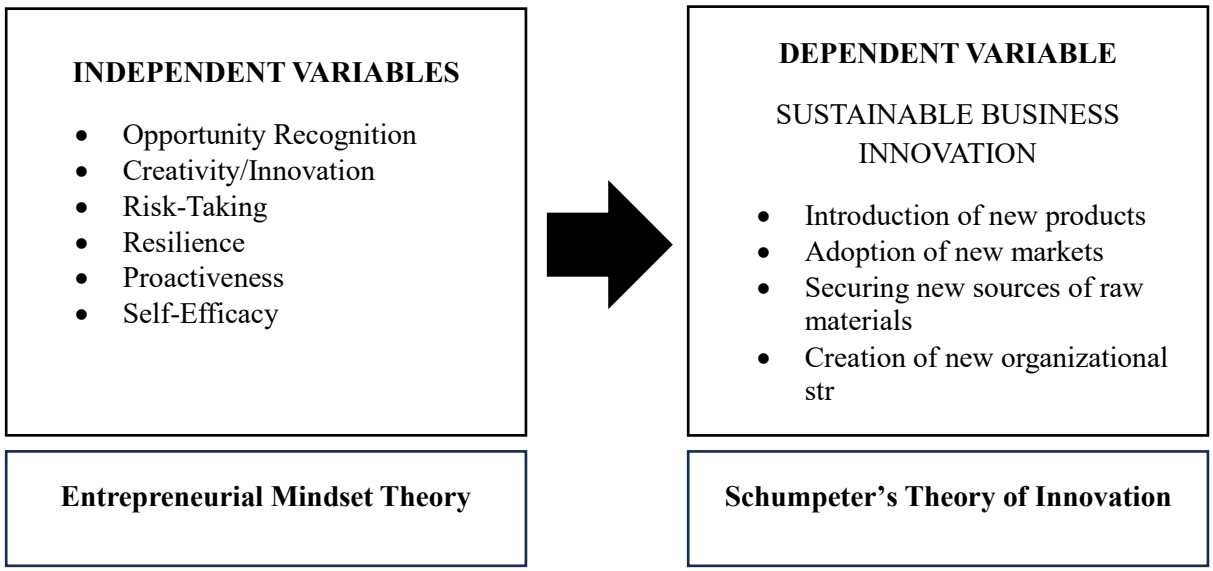
3.4. Conquest of a new source of supply of raw materials or semi-finished goods, and
3.5. Creation of a new organization or industry structure

4. Is there a significant relationship between the entrepreneurial mindset dimensions and the level of sustainable business innovation among Business and Accountancy students?
5. Which dimensions of entrepreneurial mindset significantly predict sustainable business innovation among Business and Accountancy students?
6. Based on the findings, what recommendations can be proposed to enhance entrepreneurial mindset and promote sustainable business innovation among Business and Accountancy students?

Conceptual Framework/Theoretical Framework



This study is anchored on the integration of Entrepreneurial Mindset Theory and Schumpeter's Theory of Innovation, providing a dual lens through which the relationship between individual entrepreneurial traits and sustainable business innovation can be examined. Entrepreneurial Mindset Theory posits that specific cognitive and behavioral dimensions namely opportunity recognition, creativity, risk-taking, resilience, proactiveness, and self-efficacy shape how individuals perceive, evaluate, and act upon entrepreneurial opportunities. These dimensions are not merely dispositional attributes but functional competencies that enable emerging business leaders to navigate uncertainty, generate novel ideas, and mobilize resources toward value creation.

Schumpeter's Theory of Innovation, on the other hand, emphasizes that economic development is driven by the introduction of "new combinations," which include the creation of new products, entry into new markets, acquisition of new sources of raw materials, and the establishment of new organizational structures. Within the context of sustainability, these innovations extend beyond profit maximization to encompass environmental stewardship and social responsibility. Thus, innovation becomes both an economic and ethical imperative, requiring entrepreneurs to balance viability with long-term societal impact.

By linking these two theoretical perspectives, the framework illustrates a causal pathway: entrepreneurial mindset dimensions function as independent variables that influence the dependent variable, sustainable business innovation. The study hypothesizes that traits such as opportunity recognition,

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creativity, and proactiveness serve as strong predictors of sustainability-oriented innovation, while risk-taking and resilience exert moderate but meaningful effects. This relationship underscores the notion that entrepreneurial cognition is not an abstract construct but a practical driver of innovation outcomes that align with sustainability goals.

The framework further situates higher education as a critical context for cultivating these competencies. As the findings indicate, deliberately developing entrepreneurial mindset traits can enhance students' capacity to generate innovative solutions that balance economic viability with environmental and social sustainability (Abstract). This highlights the role of curriculum design, experiential learning, and targeted training in embedding sustainability-driven entrepreneurial education.

The conceptual framework integrates individual-level cognition (entrepreneurial mindset) with organizational and economic-level outcomes (sustainable innovation), thereby bridging theory and practice. It provides a structural basis for analyzing how entrepreneurial traits among business and accountancy students translate into innovation that is both economically viable and socially responsible. This theoretical integration not only addresses the research gap in sustainability-focused entrepreneurship education but also contributes to institutional strategies for preparing future leaders capable of advancing innovation in contexts that increasingly demand responsibility, resilience, and foresight.

METHODS

This study employed a quantitative research design**,** which is appropriate for examining relationships between specific entrepreneurial mindset dimensions and sustainable business innovation, allowing for objective measurement and statistical analysis of the data collected (Creswell & Creswell, 2021). The respondents of the study were business and accountancy students enrolled at Manila, Cavite and Bulacan during the current academic year. A purposive sampling technique was used to select participants who have completed at least one entrepreneurship or business management course, ensuring that respondents possess foundational knowledge relevant to entrepreneurial concepts. A total of 263 students participated in the study, reflecting a representative sample of the target population. Data were collected using a structured survey questionnaire, designed to measure five entrepreneurial mindset dimensions opportunity recognition, risk-taking, creativity, resilience, and proactiveness and their influence on sustainable business innovation. The questionnaire consisted of Likert-scale items validated for clarity, relevance, and content through expert review by faculty members specializing in entrepreneurship and business management. Necessary revisions were made based on feedback to enhance reliability and validity, and formal approval was obtained from the university's research ethics committee. The survey was administered online over a four-week period, following approval from the academic office and informed consent from participants. Responses were encoded, processed, and analyzed using descriptive statistics. Pearson Correlation analysis and multiple regression analysis**,** which allowed the researchers to determine the strength and significance of the relationships between mindset dimensions and sustainable innovation. Ethical protocols, including confidentiality, voluntary participation, and the right to withdraw, were strictly observed throughout the study to protect respondents' rights.

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RESULTS AND DISCUSSION

Table 1. **Age of Respondents**

Indicators	Frequency	Percentage
16–18	102	43.22%
19–21	118	50.00%
22–24	14	5.93%
25 and above	2	0.85%
Total	236	100.00%

Table 1 presents the age distribution of the 236 respondents. The results indicate that the largest proportion of participants falls within the 19–21 age group, comprising 118 students or 50.00% of the total sample. This is followed by respondents aged 16–18, with 102 students representing 43.22%. A smaller percentage belongs to the 22–24 age bracket, accounting for 14 respondents (5.93%), while only 2 participants (0.85%) are aged 25 and above. Overall, 93.22% of the respondents are 21 years old and below, demonstrating that the sample is predominantly composed of younger undergraduate students. This age concentration suggests that the findings primarily reflect the entrepreneurial perspectives and innovation orientations of students in early adulthood. Individuals within this developmental stage are typically in the process of forming career intentions, strengthening cognitive flexibility, and exploring opportunity-driven thinking, which are critical components of entrepreneurial mindset formation. Their generational exposure to digital technologies and increasing awareness of sustainability issues may further shape their inclination toward innovative and responsible business practices. However, the limited representation of older students may reduce the variability in experiential learning and prior industry exposure, which could otherwise enrich structural relationships among entrepreneurial dimensions. These results imply that higher education institutions play a crucial role in embedding sustainability-oriented entrepreneurial competencies early in the academic journey to maximize students' innovative potential and long-term contribution to sustainable business development.

Table 2. **Gender of Respondents**

Indicators	Frequency	Percentage
Female	160	67.80%
Male	76	32.20%
Total	236	100.00%

Table 2 presents the gender distribution of the 236 respondents. The data indicate that the majority of participants are female, comprising 160 students or 67.80% of the total sample. In contrast, male respondents account for 76 students, representing 32.20%. This distribution demonstrates a notable

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predominance of female students within the study population. The higher proportion of female respondents suggests that the findings largely reflect the entrepreneurial mindset and innovation perspectives of women in business and accountancy programs. This demographic trend may mirror enrollment patterns in these academic disciplines, where female participation has been increasingly prominent. From an analytical standpoint, gender composition is an important contextual variable, as prior research suggests that entrepreneurial attitudes, risk tolerance, opportunity recognition, and innovation engagement may vary across genders due to socialization, educational experiences, and confidence in venture creation. The predominance of female respondents may therefore influence the overall structural relationships identified in the study. These results imply the importance of ensuring gender-responsive entrepreneurial education that supports both male and female students in developing sustainable innovation competencies. Additionally, future studies may consider conducting comparative gender-based analyses to determine whether significant differences exist in the dimensions of entrepreneurial mindset and their influence on sustainable business innovation outcomes.

Table 3. **Location of Respondents**

Indicators	Frequency	Percentage
Bulacan	89	37.71%
Cavite	102	43.22%
Manila	45	19.07%
Total	236	100.00%

Table 3 presents the geographical distribution of the 236 respondents according to location. The data indicate that the largest proportion of participants comes from Cavite, with 102 students representing 43.22% of the total sample. This is followed by Bulacan, with 89 respondents or 37.71%. Meanwhile, 45 students, equivalent to 19.07%, are from Manila. The distribution demonstrates that the majority of respondents are from nearby provincial areas, particularly Cavite and Bulacan, which together account for 80.93% of the sample. This geographic composition suggests that the findings predominantly reflect the entrepreneurial perspectives and innovation orientations of students residing in rapidly urbanizing and economically active provinces adjacent to Metro Manila. These areas are characterized by growing commercial activities, expanding small and medium enterprises, and increasing exposure to business opportunities, which may shape students' opportunity recognition, adaptability, and sustainability awareness. The representation from Manila, although smaller, provides insights from students exposed to a more competitive and highly urbanized business environment. The distribution implies that contextual factors such as regional economic development, access to entrepreneurial ecosystems, and local market exposure may influence the development of entrepreneurial mindset dimensions and sustainable business innovation tendencies. Future research may further examine whether significant differences exist across locations to better understand how geographic context shapes entrepreneurial cognition and innovation behavior among students.

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Table 4. **Location of Respondents**

Indicators	Frequency	Percentage
Bachelor of Science in Accountancy	93	39.41%
Bachelor of Science in Business Administration Major in Financial Management	56	23.73%
Bachelor of Science in Business Administration Major in Marketing Management	86	36.44%
Others	1	0.42%
Total	236	100.00%

Table 4 presents the distribution of respondents according to academic program. The data indicate that the largest proportion of participants is enrolled in the Bachelor of Science in Accountancy, with 93 students representing 39.41% of the total sample. This is followed by Bachelor of Science in Business Administration major in Marketing Management, comprising 86 respondents or 36.44%, and Bachelor of Science in Business Administration major in Financial Management, with 56 students accounting for 23.73%. Only one respondent (0.42%) falls under other programs. The distribution reflects a relatively balanced representation between accountancy and business administration students, with a slight predominance of those in accountancy. This composition suggests that the findings capture perspectives from both analytically oriented and market-oriented disciplines. Students in accountancy programs are typically trained in financial analysis, compliance, and strategic reporting, which may shape their structured and risk-assessed approach to entrepreneurial decision-making. In contrast, students in marketing and financial management are often exposed to opportunity recognition, customer value creation, and strategic investment analysis, which may influence their innovation-driven and growth-oriented mindset. The program distribution implies that variations in academic specialization may contribute to differences in entrepreneurial mindset dimensions and sustainable business innovation tendencies. Future analyses may consider examining whether significant structural differences exist across programs to better understand how disciplinary training shapes sustainability-driven entrepreneurial cognition.

Table 5. **Year Level**

Indicators	Frequency	Percentage
1st Year	196	83.05%
2nd Year	17	7.20%
3rd Year	7	2.97%
4th Year	16	6.78%
Total	236	100.00%

Table 5 presents the distribution of respondents according to year level. The data show that the majority of participants are first-year students, comprising 196 respondents or 83.05% of the total sample.

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This is followed by second-year students with 17 respondents (7.20%), fourth-year students with 16 respondents (6.78%), and third-year students with 7 respondents (2.97%). The distribution clearly indicates a strong concentration of respondents in the first year of study. The predominance of first-year students suggests that the findings largely capture the early-stage development of entrepreneurial mindset dimensions among business and accountancy students. At this stage, students are typically in the foundational phase of their academic training, where exposure to core business concepts, sustainability principles, and innovation frameworks is still developing. Consequently, their perceptions and cognitive orientations toward entrepreneurial opportunities and sustainable innovation may reflect emerging rather than fully matured competencies. This imbalance in year-level representation may limit comparative insights across different academic stages, particularly in understanding how entrepreneurial mindset dimensions evolve as students' progress through higher levels of specialization and practical exposure. The results imply the importance of integrating sustainability-driven entrepreneurial learning experiences early in the curriculum while also reinforcing and deepening these competencies in advanced years to ensure progressive development of innovation capabilities throughout the academic journey.

Table 6. **Respondents' Previous Experience or Involvement in Entrepreneurship**

Indicators	Frequency	Percentage
Assisted in a family or friend's business	55	23.31%
Attended entrepreneurship seminars or workshops	21	8.90%
Enrolled in an Entrepreneurial Mind subject	60	25.42%
Joined entrepreneurship clubs or organizations	9	3.81%
Not Applicable	47	19.92%
Participated in business competitions	6	2.54%
Started my own business	38	16.10%
Total	236	100.00%

Table 6 presents the respondents' previous experience or involvement in entrepreneurship. The results show that the largest proportion of students, 60 respondents (25.42%), reported having enrolled in an Entrepreneurial Mind subject. This is followed by 55 students (23.31%) who assisted in a family or friend's business, and 38 respondents (16.10%) who have started their own business. Meanwhile, 47 students (19.92%) indicated that the experience was not applicable to them. Smaller proportions attended entrepreneurship seminars or workshops (21 respondents; 8.90%), joined entrepreneurship clubs or organizations (9 respondents; 3.81%), or participated in business competitions (6 respondents; 2.54%). The distribution indicates that a considerable number of students have had formal academic exposure to entrepreneurship, while a substantial portion also gained informal experiential learning through family business involvement or venture creation. These forms of exposure may strengthen opportunity recognition, risk assessment, and innovation-oriented thinking, which are critical components of an entrepreneurial mindset. However, the relatively lower participation in competitions and entrepreneurial organizations

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suggests limited engagement in highly immersive or practice-based entrepreneurial ecosystems. The findings imply that while foundational entrepreneurial exposure is present, there remains an opportunity for institutions to intensify experiential learning platforms such as business incubation programs, competitions, and organizational involvement. Strengthening these avenues may further enhance students' entrepreneurial mindset dimensions and their capacity to translate sustainability-oriented ideas into innovative business initiatives.

Table 7. **Perceived Level of Opportunity Recognition Among Business and Accountancy Students**

Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I believe that I can easily notice business opportunities in my environment. (Thoudam et al., 2023)	3.15	0.65	3	Agree
I feel confident that I can recognize unmet needs that could be turned into innovative ventures. (Thoudam et al., 2023)	3.08	0.63	5	Agree
I actively seek out trends that may lead to new and sustainable business concepts. (Thoudam et al., 2023)	3.23	0.68	1	Agree
I believe I notice opportunities for creating value where others may not. (Thoudam et al., 2023)	3.15	0.63	4	Agree
I think I can spot changes in the market that can inspire innovative business ideas. (Thoudam et al., 2023)	3.18	0.66	2	Agree
Weighted Mean	3.16	0.65		Agree

The Table 7 shows the perceived level of opportunity recognition among Business and Accountancy students, indicating a generally positive inclination, with a weighted mean of 3.16 (79%) and interpreted as "Agree." Among the indicators, students most strongly agree that they actively seek out trends that may lead to new and sustainable business concepts, with a mean of 3.23 (81%) and ranked 1. This is followed by their ability to spot changes in the market that can inspire innovative business ideas, with a mean of 3.18 (80%) and ranked 2. Students also indicate agreement in noticing business opportunities in their environment, with a mean of 3.15 (79%) and ranked 3, and in identifying opportunities for creating value where others may not, with a mean of 3.15 (79%) and ranked 4. Lastly, students feel confident in recognizing unmet needs that could be turned into innovative ventures, with a mean of 3.08 (77%) and ranked 5. These results suggest that students possess a favorable mindset for identifying and leveraging business opportunities, which is crucial for driving sustainable innovation. The implication is that educational interventions, such as market trend analysis, entrepreneurial workshops, and opportunity recognition exercises, can further enhance students' ability to identify viable business ideas and translate them into sustainable ventures, strengthening their entrepreneurial competencies.

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Table 8. **Perceived Level of Risk-Taking Among Business and Accountancy Students**

Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I believe I am willing to take calculated risks to pursue innovative and sustainable business ideas. (Vinsensius & Ryandra, 2024)	3.16	0.64	2	Agree
I think I can pursue entrepreneurial efforts despite uncertainty or potential failure. (Vinsensius & Ryandra, 2024)	3.12	0.68	3	Agree
I believe embracing risk is necessary to develop new business solutions. (Vinsensius & Ryandra, 2024)	3.36	0.64	1	Agree
I feel comfortable stepping outside my comfort zone when exploring business ideas. (Vinsensius & Ryandra, 2024)	3.10	0.76	4	Agree
I think I can manage uncertainty while pursuing sustainable innovation. (Vinsensius & Ryandra, 2024)	3.06	0.66	5	Agree
Weighted Mean	3.16	0.68		Agree

The Table 8 shows the perceived level of risk-taking among Business and Accountancy students, indicating a generally positive inclination toward entrepreneurial risk behavior, with a weighted mean of 3.16 (79%) and interpreted as “Agree.” Among the indicators, students most strongly recognize that embracing risk is necessary to develop new business solutions, with a mean of 3.36 (84%) and ranked 1, followed by their willingness to take calculated risks to pursue innovative and sustainable business ideas, with a mean of 3.16 (79%) and ranked 2. They also agree that they can pursue entrepreneurial efforts despite uncertainty or potential failure, with a mean of 3.12 (78%) and ranked 3, and that they feel comfortable stepping outside their comfort zones when exploring business ideas, with a mean of 3.10 (78%) and ranked 4. Lastly, students indicate agreement in their ability to manage uncertainty while pursuing sustainable innovation, with a mean of 3.06 (77%) and ranked 5. These results suggest that students possess a favorable risk-taking mindset, which is essential for fostering sustainable business innovation. The implication is that integrating experiential learning, entrepreneurial simulations, and risk management training into the curriculum can further enhance their capacity to navigate uncertainty, make informed decisions, and transform innovative ideas into sustainable business ventures.

Table 9. **Perceived Level of Creativity/Innovation Among Business and Accountancy Students**

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Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I believe that I can generate creative and useful ideas for sustainable business solutions. (Wang et al., 2021)	3.18	0.70	3	Agree
I feel confident in thinking of new ways to solve business problems. (Wang et al., 2021)	3.10	0.73	5	Agree
I think my creativity helps me envision innovative business concepts. (Wang et al., 2021)	3.17	0.66	4	Agree
I believe I can apply creative thinking to improve business processes. (Wang et al., 2021)	3.24	0.63	1	Agree
I feel that my ability to be innovative will help me create sustainable value in business. (Wang et al., 2021)	3.20	0.64	2	Agree
Weighted Mean	3.18	0.67		Agree

The table 9 shows the perceived level of creativity and innovation among Business and Accountancy students, reflecting a generally positive disposition with a weighted mean of 3.18 (80%) and interpreted as "Agree." Among the indicators, students most strongly agree that they can apply creative thinking to improve business processes, with a mean of 3.24 (81%) and ranked 1. This is followed by the belief that their ability to be innovative will help create sustainable value in business, with a mean of 3.20 (80%) and ranked 2. Students also indicate agreement in generating creative and useful ideas for sustainable business solutions, with a mean of 3.18 (80%) and ranked 3, and in thinking that their creativity helps them envision innovative business concepts, with a mean of 3.17 (79%) and ranked 4. The lowest-rated indicator, feeling confident in thinking of new ways to solve business problems, still shows agreement with a mean of 3.10 (78%) and ranked 5. These results suggest that students possess a favorable mindset toward creative and innovative thinking, which is essential for generating sustainable business solutions. The implication is that integrating innovation-driven activities such as design thinking workshops, problem-solving simulations, and creative business challenges into the curriculum can enhance students' capacity to generate novel ideas, implement innovative solutions, and contribute to sustainable business practices.

Table 10. **Perceived Level of Resilience Among Business and Accountancy Students**

Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I believe that I can recover quickly after setbacks or failures in business pursuits. Zhao & Wibowo (2021)	2.92	0.70	5	Agree
I think I stay motivated when pursuing long-term entrepreneurial goals Zhao & Wibowo (2021)	3.13	0.65	4	Agree

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I believe I learn from difficulties and use them to improve future performance. Zhao & Wibowo (2021)	3.37	0.63	1	Agree
I feel confident in overcoming challenges in my business journey. (Zhao & Wibowo (2021)	3.17	0.70	3	Agree
I believe that I persist even when tasks are hard or complex. (Zhao & Wibowo (2021)	3.18	0.63	2	Agree
Weighted Mean	3.15	0.66		Agree

The Table 10 shows the perceived level of resilience among Business and Accountancy students, indicating a generally positive attitude toward overcoming challenges, with a weighted mean of 3.15 (79%) and interpreted as "Agree." Among the indicators, students most strongly agree that they learn from difficulties and use them to improve future performance, with a mean of 3.37 (84%) and ranked 1. This is followed by their belief that they persist even when tasks are hard or complex, with a mean of 3.18 (80%) and ranked 2, and confidence in overcoming challenges in their business journey, with a mean of 3.17 (79%) and ranked 3. Students also agree that they stay motivated when pursuing long-term entrepreneurial goals, with a mean of 3.13 (78%) and ranked 4, while the lowest-rated item recovering quickly after setbacks or failures—has a mean of 2.92 (73%) and ranked 5, though still interpreted as "Agree." These results suggest that students generally possess a resilient entrepreneurial mindset, which is crucial for sustaining efforts in uncertain and challenging business environments. The implication is that resilience-building interventions, such as mentorship programs, reflection exercises, and experiential learning activities, can further strengthen students' ability to recover from setbacks, remain persistent, and adapt to challenges, ultimately enhancing their capacity to innovate and sustain business ventures successfully.

Table 11. **Perceived Level of Proactiveness Among Business and Accountancy Students**

Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I believe that I take initiative in pursuing business opportunities without waiting for others. (Vinsensius & Ryandra, 2024)	3.13	0.70	2	Agree
I think I act quickly when I identify something that could improve my business idea. (Vinsensius & Ryandra, 2024)	3.12	0.67	3	Agree
I feel confident in planning ahead to address future business challenges. (Vinsensius & Ryandra, 2024)	3.14	0.70	1	Agree
I feel confident in overcoming challenges in my business journey. (Jeong et al., 2021)	3.07	0.71	4	Agree
I think I take early action when I have a business idea. (Vinsensius & Ryandra, 2024)	3.07	0.74	4	Agree
Weighted Mean	3.11	0.70		Agree

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Table 11 shows the perceived level of proactiveness among Business and Accountancy students, reflecting a generally positive disposition with a weighted mean of 3.11 (78%) and interpreted as "Agree." Among the indicators, students most strongly agree that they feel confident in planning ahead to address future business challenges, with a mean of 3.14 (79%) and ranked 1. This is followed by their belief that they take initiative in pursuing business opportunities without waiting for others, with a mean of 3.13 (78%) and ranked 2, and their tendency to act quickly when identifying opportunities that could improve their business ideas, with a mean of 3.12 (78%) and ranked 3. Indicators regarding overcoming challenges in their business journey and taking early action when having a business idea both have a mean of 3.07 (77%) and are ranked 4. These results suggest that students possess a moderately strong proactive mindset, which is crucial for identifying and acting on opportunities before competitors do. The implication is that fostering proactiveness through entrepreneurial simulations, early-stage project development, and strategic planning exercises can further enhance students' ability to anticipate challenges, initiate business actions independently, and implement innovative solutions, thereby strengthening their overall entrepreneurial competence and capacity for sustainable business innovation.

Table 12. **Perceived Level of Self-Efficacy Among Business and Accountancy Students**

Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I believe I have the skills required to effectively start and run a business. (Wang et al., 2021)	3.10	0.73	4	Agree
I think I am confident in making decisions related to business challenges. (Wang et al., 2021)	3.07	0.71	5	Agree
I believe I can persist until my entrepreneurial goals are achieved. (Wang et al., 2021)	3.18	0.67	2	Agree
I feel capable of executing plans that help my business ideas succeed. (Wang et al., 2021)	3.14	0.68	3	Agree
I think my belief in my abilities helps me face challenges confidently. (Wang et al., 2021)	3.21	0.70	1	Agree
Weighted Mean	3.14	0.70		Agree

Table 12 shows the perceived level of self-efficacy among Business and Accountancy students, indicating a generally positive outlook with a weighted mean of 3.14 (79%) and interpreted as "Agree." Among the indicators, students most strongly agree that their belief in their abilities helps them face challenges confidently, with a mean of 3.21 (80%) and ranked 1. This is followed by their perception that they can persist until their entrepreneurial goals are achieved, with a mean of 3.18 (80%) and ranked 2, and their confidence in executing plans that help business ideas succeed, with a mean of 3.14 (79%) and ranked 3. Students also agree that they have the skills required to effectively start and run a business, with a mean of 3.10 (78%) and ranked 4, and that they are confident in making decisions related to business challenges,

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with a mean of 3.07 (77%) and ranked 5. These results suggest that students possess a favorable level of entrepreneurial self-efficacy, which is critical for translating knowledge, skills, and confidence into practical business actions. The implication is that integrating skill-building workshops, decision-making exercises, and real-world entrepreneurial projects into the curriculum can further strengthen students' self-efficacy, enhancing their capacity to initiate, manage, and sustain innovative business ventures successfully.

Table 13. **Level of Sustainable Business Innovation Among Students in Terms of New Product Introduction**

Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I often come up with ideas for new products that could contribute to sustainable business practices. (Sinkovics et al., 2021)	3.06	0.70	3	Agree
I feel confident that I can conceptualize a modified or entirely new product that meets both market needs and sustainability goals. (Sinkovics et al., 2021)	3.04	0.62	5	Agree
I believe I can participate in introducing a new or improved product that enhances sustainable value. (Sinkovics et al., 2021)	3.06	0.71	3	Agree
I think I can help identify opportunities for product innovation that address environmental or social challenges. (Sinkovics et al., 2021)	3.10	0.65	2	Agree
I feel that creating new products with sustainable features is a key part of my entrepreneurial approach. (Sinkovics et al., 2021)	3.19	0.65	1	Agree
Weighted Mean	3.09	0.67		Agree

Table 13 shows the perceived level of sustainable business innovation among Business and Accountancy students in terms of new product introduction, with a weighted mean of 3.09 (77%) and interpreted as "Agree." Among the indicators, students most strongly agree that creating new products with sustainable features is a key part of their entrepreneurial approach, with a mean of 3.19 (80%) and ranked 1. This is followed by their belief that they can help identify opportunities for product innovation that address environmental or social challenges, with a mean of 3.10 (78%) and ranked 2. Indicators regarding their ability to come up with ideas for new products that contribute to sustainable business practices and participation in introducing new or improved products that enhance sustainable value both have a mean of 3.06 (77%) and are ranked 3. The lowest-rated indicator, confidence in conceptualizing a modified or entirely new product that meets both market needs and sustainability goals, has a mean of 3.04 (76%) and ranked 5. These results suggest that students demonstrate a positive orientation toward introducing innovative products that promote sustainability. The implication is that incorporating design thinking workshops, product development simulations, and sustainability-focused innovation projects into the

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curriculum can further strengthen students' ability to develop creative, viable, and environmentally or socially responsible products, thereby enhancing their contribution to sustainable business practices.

Table 14. **Level of Sustainable Business Innovation Among Students in Terms of Introduction of a New Method of Production**

Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I feel confident adopting a new method of production that enhances operational performance. (Qureshi et al., 2023)	3.14	0.71	3	Agree
I believe introducing new production techniques can improve product quality. (Qurequereshi et al., 2023)	3.26	0.67	2	Agree
I am capable of supporting changes to existing production processes. (Qureshi et al., 2023)	3.14	0.65	4	Agree
I think learning and applying a new method of production is part of my professional role. (Qureshi et al., 2023)	3.14	0.74	5	Agree
I am willing to implement innovative production methods even if they require additional effort. (Qureshi et al., 2023)	3.27	0.67	1	Agree
Weighted Mean	3.19	0.69		Agree

Table 14 shows the perceived level of sustainable business innovation among Business and Accountancy students in terms of introducing new methods of production, with a weighted mean of 3.19 (80%) and interpreted as "Agree." Among the indicators, students most strongly agree that they are willing to implement innovative production methods even if they require additional effort, with a mean of 3.27 (82%) and ranked 1. This is followed by their belief that introducing new production techniques can improve product quality, with a mean of 3.26 (82%) and ranked 2. Students also indicate agreement in feeling confident adopting a new method of production that enhances operational performance, with a mean of 3.14 (79%) and ranked 3, as well as in supporting changes to existing production processes, with a mean of 3.14 (79%) and ranked 4. Lastly, they agree that learning and applying a new method of production is part of their professional role, with a mean of 3.14 (79%) and ranked 5. These results suggest that students are positively inclined toward adopting and implementing innovative production methods, which is essential for enhancing operational efficiency and sustainable business practices. The implication is that incorporating hands-on production simulations, process improvement exercises, and training on innovative techniques can further strengthen students' capacity to apply new methods effectively, contributing to improved productivity, quality, and sustainability in future business ventures.

Table 15. **Level of Sustainable Business Innovation Among Students in Terms of Opening of a New Market**

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Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I am confident in identifying opportunities to enter into new markets. (Guan et al., 2025)	3.09	0.70	5	Agree
I feel capable of proposing strategies to attract customers in new market segments. (Guan et al., 2025)	3.11	0.69	4	Agree
I believe I can adapt products or services to meet the needs of new markets. (Guan et al., 2025)	3.11	0.66	2	Agree
I think I can contribute to planning activities that support opening new markets. (Guan et al., 2025)	3.11	0.64	3	Agree
I am willing to explore and implement ideas that help our organization enter untapped market areas. (Farooq & Vij, 2025)	3.24	0.69	1	Agree
Weighted Mean	3.13	0.68		Agree

Table 15 shows the perceived level of sustainable business innovation among Business and Accountancy students in terms of opening new markets, with a weighted mean of 3.13 (78%) and interpreted as "Agree." Among the indicators, students most strongly agree that they are willing to explore and implement ideas that help their organization enter untapped market areas, with a mean of 3.24 (81%) and ranked 1. This is followed by their belief that they can adapt products or services to meet the needs of new markets, with a mean of 3.11 (78%) and ranked 2, and their perception that they can contribute to planning activities that support opening new markets, with a mean of 3.11 (78%) and ranked 3. Students also indicate agreement in feeling capable of proposing strategies to attract customers in new market segments, with a mean of 3.11 (78%) and ranked 4, and in confidence in identifying opportunities to enter into new markets, with a mean of 3.09 (77%) and ranked 5. These results suggest that students demonstrate a positive orientation toward expanding into new markets, which is crucial for sustainable business growth. The implication is that incorporating market research exercises, business development simulations, and strategic planning activities into the curriculum can further enhance students' ability to identify, evaluate, and act upon new market opportunities, thereby strengthening their capacity to implement innovative and sustainable business strategies.

Table 16. **Level of Sustainable Business Innovation Among Students in Terms of Conquest of a New Source of Supply of raw materials or semi-finished goods**

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Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I believe that I can help in securing new, sustainable sources of raw materials or semi-finished goods. (Sinkovics et al., 2021)	3.06	0.70	5	Agree
I feel confident that I can think of ways to source materials more sustainably. (Sinkovics et al., 2021)	3.14	0.67	4	Agree
I think I can participate in identifying suppliers who prioritize sustainable practices. (Sinkovics et al., 2021)	3.16	0.67	3	Agree
I believe that finding alternative, environmentally responsible inputs is part of innovative entrepreneurship. (Sinkovics et al., 2021)	3.21	0.71	2	Agree
I feel that improving supply sustainability is essential in my approach to business innovation. (Sinkovics et al., 2021)	3.24	0.65	1	Agree
Weighted Mean	3.16	0.68		Agree

Table 16 shows the perceived level of sustainable business innovation among Business and Accountancy students in terms of securing new sources of raw materials or semi-finished goods, with a weighted mean of 3.16 (79%) and interpreted as "Agree." Among the indicators, students most strongly agree that improving supply sustainability is essential in their approach to business innovation, with a mean of 3.24 (81%) and ranked 1. This is followed by their belief that finding alternative, environmentally responsible inputs is part of innovative entrepreneurship, with a mean of 3.21 (80%) and ranked 2. Students also indicate agreement in their ability to participate in identifying suppliers who prioritize sustainable practices, with a mean of 3.16 (79%) and ranked 3, and in thinking of ways to source materials more sustainably, with a mean of 3.14 (79%) and ranked 4. The lowest-rated indicator, helping to secure new, sustainable sources of raw materials or semi-finished goods, has a mean of 3.06 (77%) and ranked 5, though still interpreted as "Agree." These results suggest that students are positively inclined toward ensuring sustainable supply chains, which is a critical component of sustainable business innovation. The implication is that integrating supplier sustainability exercises, procurement simulations, and projects on environmentally responsible sourcing can further enhance students' capability to secure sustainable inputs, strengthen supply chain innovation, and contribute to the overall sustainability of business operations.

Table 17. **Level of Sustainable Business Innovation Among Students in Terms of Creation of a New Organization or Industry Structure**

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Indicators	Mean	Std. Deviation	Rank	Verbal interpretation
I believe that I can contribute to creating a new organization or industry structure with a focus on sustainability. (Sinkovics et al., 2021)	3.19	0.72	4	Agree
I feel confident that I can think of ways to source materials more sustainably. (Sinkovics et al., 2021)	3.17	0.66	5	Agree
I think I can help develop new organizational approaches that integrate sustainability into the core of business operations. (Sinkovics et al., 2021)	3.19	0.67	3	Agree
I believe that innovation in organizational structure can drive long-term sustainable performance. (Sinkovics et al., 2021)	3.22	0.63	2	Agree
I feel that envisioning new industry structures that support sustainability is part of my entrepreneurial mindset. (Sinkovics et al., 2021)	3.24	0.66	1	Agree
Weighted Mean	3.20	0.67		Agree

Table 17 shows the perceived level of sustainable business innovation among Business and Accountancy students in terms of creating a new organization or industry structure, with a weighted mean of 3.20 (80%) and interpreted as “Agree.” Among the indicators, students most strongly agree that envisioning new industry structures that support sustainability is part of their entrepreneurial mindset, with a mean of 3.24 (81%) and ranked 1. This is followed by their belief that innovation in organizational structure can drive long-term sustainable performance, with a mean of 3.22 (81%) and ranked 2. Students also indicate agreement in their ability to help develop new organizational approaches that integrate sustainability into core business operations, with a mean of 3.19 (80%) and ranked 3, and in contributing to creating a new organization or industry structure with a focus on sustainability, with a mean of 3.19 (80%) and ranked 4. The lowest-rated indicator, thinking of ways to source materials more sustainably, has a mean of 3.17 (79%) and ranked 5, yet is still interpreted as “Agree.” These results suggest that students are positively inclined toward innovative organizational design and restructuring to promote sustainability. The implication is that incorporating organizational design projects, industry simulations, and case studies on sustainable enterprise structures can further enhance students’ ability to innovate at a systemic level, contributing to the long-term sustainability and competitiveness of future businesses.

Table 18. **Relationship Between Entrepreneurial Mindset Dimensions and Sustainable Business Innovation Levels of Business and Accountancy Students**

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Correlations

		OPPORTUNITY_RECOGNITION	RISK_TAKING	CREATIVITY_INNOVATION	RESILIENCE	PROACTIVENESS	SELF_EFFICACY	Introduction_of_a_New_Product	Introduction_of_a_new_method_of_production	Opening_of_a_new_market	Conquest_of_a_new_source_of_supply_of_raw_materials_or_semi_finished_goods	Creation_of_a_new_organization_or_industry_structure
OPPORTUNITY_RECOGNITION	Pearson Correlation	1	.623***	.674***	.613***	.678***	.637***	.615***	.532***	.553***	.518***	.498***
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
	N	236	236	236	236	236	236	236	236	236	236	236
RISK_TAKING	Pearson Correlation	.623***	1	.747***	.751***	.773***	.752***	.675***	.676***	.689***	.654***	.631***
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
	N	236	236	236	236	236	236	236	236	236	236	236
CREATIVITY_INNOVATION	Pearson Correlation	.674***	.747***	1	.732***	.752***	.762***	.681***	.701***	.692***	.714***	.702***
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
	N	236	236	236	236	236	236	236	236	236	236	236
RESILIENCE	Pearson Correlation	.613***	.751***	.732***	1	.804***	.750***	.658***	.657***	.698***	.664***	.667***
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001	<.001	<.001	<.001	<.001	<.001

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	N	236	236	236	236	236	236	236	236	236	236	236
PROACTIVENESS	Pearson Correlation	.678**	.773**	.752**	.804***	1	.810**	.751**	.687**	.691**	.671**	.690**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001	<.001	<.001	<.001	<.001	<.001
	N	236	236	236	236	236	236	236	236	236	236	236
SELF_EFFICACY	Pearson Correlation	.637**	.752**	.762**	.750***	.810**	1	.733**	.708**	.718**	.693**	.695**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001		<.001	<.001	<.001	<.001	<.001
	N	236	236	236	236	236	236	236	236	236	236	236
Introduction_of_a_New_ Product	Pearson Correlation	.615**	.675**	.681**	.658***	.751**	.733**	1	.717**	.718**	.710**	.718**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001		<.001	<.001	<.001	<.001
	N	236	236	236	236	236	236	236	236	236	236	236
Introduction_of_a_new_method_of_production	Pearson Correlation	.532**	.676**	.701**	.657***	.687**	.708**	.717**	1	.797**	.797**	.739**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	<.001		<.001	<.001	<.001
	N	236	236	236	236	236	236	236	236	236	236	236
Opening_of_a_new_market	Pearson Correlation	.553**	.689**	.692**	.698***	.691**	.718**	.718**	.797**	1	.784**	.802**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001		<.001	<.001
	N	236	236	236	236	236	236	236	236	236	236	236
Conquest_of_a_new_source_of_s	Pearson Correlation	.518**	.654**	.714**	.664***	.671**	.693**	.710**	.797**	.784**	1	.821**

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upply_of_raw_materials_or_semi_finished_goods	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001		<.001
	N	236	236	236	236	236	236	236	236	236	236	236
Creation_of_a_new_organization_or_industry_structure	Pearson Correlation	.498***	.631***	.702***	.667***	.690***	.695***	.718***	.739***	.802***	.821***	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	
	N	236	236	236	236	236	236	236	236	236	236	236

***. *Correlation at 0.001(2-tailed)*

Table 18 presents the correlation between entrepreneurial mindset dimensions and the levels of sustainable business innovation among Business and Accountancy students. The results indicate that all dimensions of entrepreneurial mindset, opportunity recognition, risk-taking, creativity/innovation, resilience, proactiveness, and self-efficacy are positively and significantly correlated with each aspect of sustainable business innovation at the 0.001 level (2-tailed). Specifically, creativity/innovation shows the strongest correlations with risk-taking (r = 0.747), proactiveness (r = 0.752), self-efficacy (r = 0.762), and various indicators of sustainable business innovation, including the introduction of a new product (r = 0.681) and the conquest of a new source of supply (r = 0.714). Similarly, proactiveness demonstrates strong positive associations with all innovation dimensions, with the highest correlations observed in self-efficacy (r = 0.810) and introduction of a new product (r = 0.751). All sustainable business innovation indicators, including new product introduction, new method of production, opening of a new market, conquest of a new supply source, and creation of a new organization or industry, structure are also significantly intercorrelated (ranging from r = 0.710 to r = 0.821), suggesting that these innovation practices are mutually reinforcing. These findings imply that students who demonstrate stronger entrepreneurial mindset traits are more likely to engage in and implement sustainable business innovations effectively. It underscores the importance of fostering opportunity recognition, calculated risk-taking, creativity, resilience, proactiveness, and self-efficacy to enhance sustainable business innovation outcomes.

Table 19. **Relationship Between Opportunity Recognition as Dimensions of Entrepreneurial Mindset and Levels of Sustainable Business Innovation Among Business and Accountancy Students**

ANOVA[a,b]

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Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	35.953	60	.599	4.639	<.001
Residual	22.606	175	.129		
Total	58.559	235			

a. Dependent Variable: OPPORTUNITY_RECOGNITION

b. Model: (Intercept), Introduction_of_a_New_ Product, Introduction_of_a_new_method_of_production, Opening_of_a_new_market, Conquest_of_a_new_source_of_supply_of_raw_materials_or_semi_finished_goods, Creation_of_a_new_organization_or_industry_structure

Table 19 shows the results of the ANOVA indicate a significant relationship between opportunity recognition and the level of sustainable business innovation among Business and Accountancy students. Specifically, the regression model yielded an F-value of 4.639 with a p-value < 0.001, suggesting that opportunity recognition significantly explains variations in sustainable business innovation scores. The regression sum of squares (35.953) relative to the residual sum of squares (22.606) demonstrates that a substantial portion of the variance in sustainable business innovation is attributable to students' ability to recognize and act on business opportunities. These findings provide strong evidence to reject the null hypothesis H_{01}, indicating that there is a significant relationship between opportunity recognition and sustainable business innovation. Furthermore, opportunity recognition emerges as a significant predictor of sustainable business innovation, providing partial rejection of null hypothesis H_{02}. This implies that among the dimensions of entrepreneurial mindset, opportunity recognition plays a pivotal role in influencing students' capacity to implement innovative and sustainable business practices. The results underscore the importance of fostering opportunity recognition in business education. By equipping students with the skills to identify and capitalize on emerging opportunities, educational institutions can enhance the innovative capabilities of future business professionals, promoting the development of sustainable business solutions. For curriculum designers and educators, this finding suggests that integrating experiential learning, real-world problem-solving, and opportunity-focused projects into business programs may strengthen students' entrepreneurial mindset and directly contribute to sustainable business innovation. Additionally, the significant predictive effect highlights the potential for targeted interventions, such as entrepreneurship workshops and mentorship programs, to cultivate opportunity recognition and, consequently, sustainable innovation among students.

Table 20. **Relationship Between Risk-Taking as Dimensions of Entrepreneurial Mindset and Levels of Sustainable Business Innovation Among Business and Accountancy Students**

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ANOVA[a,b]

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	45.364	60	.756	7.550	<.001
Residual	17.525	175	.100		
Total	62.889	235			

Table 20 the ANOVA results reveal a significant relationship between risk-taking and the level of sustainable business innovation among Business and Accountancy students. The regression model produced an F-value of 7.550 with a p-value < 0.001, indicating that risk-taking significantly contributes to explaining the variance in sustainable business innovation. The regression sum of squares (45.364) compared to the residual sum of squares (17.525) suggests that a considerable portion of the variation in sustainable business innovation is accounted for by students' propensity to take calculated risks in entrepreneurial activities. These findings support the rejection of the null hypothesis H_{01}, confirming a significant relationship between risk-taking and sustainable business innovation. Moreover, risk-taking also demonstrates a significant predictive effect, providing evidence against H_{02}, meaning that students who are more willing to engage in risk-taking behaviors are more likely to implement innovative and sustainable business practices. The results highlight the critical role of risk-taking in fostering sustainable business innovation. For business educators, this underscores the importance of creating learning environments that encourage calculated experimentation, resilience, and decision-making under uncertainty. By incorporating simulation exercises, entrepreneurial competitions, and case-based learning, students can develop a comfort with taking informed risks while mitigating potential negative consequences. Furthermore, cultivating risk-taking within the student population can enhance their ability to pursue novel products, methods, markets, and organizational innovations, ultimately contributing to the development of sustainable business solutions. This finding suggests that interventions aimed at improving students' risk-taking capabilities may directly strengthen the innovation potential of future business professionals.

Table 21. **Relationship Between Creativity/Innovation as Dimensions of Entrepreneurial Mindset and Levels of Sustainable Business Innovation Among Business and Accountancy Students**

ANOVA[a,b]

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	54.852	60	.914	8.132	<.001
Residual	19.673	175	.112		
Total	74.525	235			

a. Dependent Variable: CREATIVITY_INNOVATION

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b. Model: (Intercept), Introduction_of_a_New_ Product, Introduction_of_a_new_method_of_production, Opening_of_a_new_market, Conquest_of_a_new_source_of_supply_of_raw_materials_or_semi_finished_goods, Creation_of_a_new_organization_or_industry_structure

The ANOVA results demonstrate a significant relationship between creativity/innovation and the level of sustainable business innovation among Business and Accountancy students. The regression model yielded an F-value of 8.132 with a p-value < 0.001, indicating that creativity and innovation significantly explain variations in sustainable business innovation. The regression sum of squares (54.852) relative to the residual sum of squares (19.673) shows that creativity and innovation account for a substantial portion of the variance in sustainable business innovation scores. These findings provide strong evidence to reject the null hypothesis H_{01}, confirming that creativity/innovation is significantly related to sustainable business innovation. Additionally, the predictive significance of the regression model indicates that students who exhibit higher levels of creativity and innovation are more likely to engage in practices that foster sustainable business innovation, providing grounds to reject H_{02} for this dimension. The results underscore the importance of nurturing creativity and innovative thinking in business education. Encouraging students to generate novel ideas, experiment with new approaches, and apply creative problem-solving can directly enhance their capacity for sustainable business innovation. For educators and curriculum designers, this finding suggests integrating design thinking exercises, innovation labs, collaborative projects, and entrepreneurial simulations into business programs to cultivate creativity. Moreover, fostering a creative mindset can help students identify new products, methods, markets, and organizational strategies that are both innovative and sustainable, ultimately preparing them to contribute effectively to the evolving demands of the business environment. This highlights that creativity is not just an individual trait but a strategic competency essential for advancing sustainable innovation among future business professionals.

Table 22. ***Relationship Between Resilience as Dimensions of Entrepreneurial Mindset and Levels of Sustainable Business Innovation Among Business and Accountancy Students***

ANOVA[a,b]

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	49.117	60	.819	9.711	<.001
Residual	14.751	175	.084		
Total	63.868	235			

a. Dependent Variable: RESILIENCE

b. Model: (Intercept), Introduction_of_a_New_ Product, Introduction_of_a_new_method_of_production, Opening_of_a_new_market, Conquest_of_a_new_source_of_supply_of_raw_materials_or_semi_finished_goods, Creation_of_a_new_organization_or_industry_structure

Table 22 shows the ANOVA results indicate a significant relationship between resilience and the level of sustainable business innovation among Business and Accountancy students. The regression model produced an F-value of 9.711 with a p-value < 0.001, demonstrating that resilience significantly contributes

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to explaining the variance in sustainable business innovation. The regression sum of squares (49.117) compared to the residual sum of squares (14.751) suggests that resilience accounts for a substantial portion of the variance in students' sustainable innovation behaviors. These findings support the rejection of the null hypothesis H_{01}, confirming that resilience is significantly related to sustainable business innovation. Moreover, the predictive significance of the model indicates that students who demonstrate higher levels of resilience are more likely to engage in sustainable business innovation, thereby rejecting H_{02} for this dimension. This implies that resilient students can effectively navigate challenges, adapt to uncertainties, and persist in implementing innovative and sustainable business solutions. The results emphasize the vital role of resilience in promoting sustainable business innovation. For educators and business programs, fostering resilience can be achieved through experiential learning, problem-based challenges, entrepreneurship simulations, and reflective practices that encourage students to overcome setbacks and maintain persistence. By developing resilience, students are better equipped to pursue new products, methods, markets, and organizational strategies despite obstacles, ensuring the continuity and sustainability of innovative initiatives. This highlights that resilience is a key entrepreneurial competency that not only strengthens individual capacity but also enhances organizational and societal outcomes by supporting sustainable innovation practices among emerging business professionals.

Table 23. **Relationship Between Proactiveness as Dimensions of Entrepreneurial Mindset and Levels of Sustainable Business Innovation Among Business and Accountancy Students**

ANOVA[a,b]

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	64.736	60	1.079	9.322	<.001
Residual	20.255	175	.116		
Total	84.992	235			

a. Dependent Variable: PROACTIVENESS

b. Model: (Intercept), Introduction_of_a_New_ Product, Introduction_of_a_new_method_of_production, Opening_of_a_new_market, Conquest_of_a_new_source_of_supply_of_raw_materials_or_semi_finished_goods, Creation_of_a_new_organization_or_industry_structure

Table 23 shows the ANOVA results reveal a significant relationship between proactiveness and the level of sustainable business innovation among Business and Accountancy students. The regression model yielded an F-value of 9.322 with a p-value < 0.001, indicating that proactiveness significantly explains variations in sustainable business innovation. The regression sum of squares (64.736) relative to the residual sum of squares (20.255) demonstrates that proactiveness accounts for a substantial portion of the variance in sustainable business innovation scores, highlighting its strong influence among the students surveyed. These results provide sufficient evidence to reject the null hypothesis H_{01}, confirming that proactiveness is

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significantly related to sustainable business innovation. Furthermore, the predictive significance of the model indicates that students who display higher levels of proactiveness are more likely to engage in innovative and sustainable business practices, supporting the rejection of H_{02} for this dimension. This suggests that proactive students take initiative in identifying opportunities, anticipating challenges, and implementing innovative solutions that drive sustainable business practices. The findings highlight the crucial role of proactiveness in fostering sustainable business innovation. For educators and program designers, promoting proactiveness can be achieved through entrepreneurial projects, real-world business simulations, mentorship programs, and decision-making exercises that encourage students to take initiative and act on opportunities. Cultivating proactiveness equips students with the ability to anticipate market trends, implement new processes, and develop innovative products or services that contribute to sustainable business practices. This demonstrates that proactiveness is not only an individual entrepreneurial trait but also a strategic competency that can enhance students' ability to innovate responsibly and sustainably in future business contexts.

Table 24. **Relationship Between Self-Efficacy as Dimensions of Entrepreneurial Mindset and Levels of Sustainable Business Innovation Among Business and Accountancy Students**

ANOVA[a,b]

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	59.765	60	.996	9.274	<.001
Residual	18.797	175	.107		
Total	78.561	235			

a. Dependent Variable: SELF_EFFICACY

b. Model: (Intercept), Introduction_of_a_New_ Product, Introduction_of_a_new_method_of_production, Opening_of_a_new_market, Conquest_of_a_new_source_of_supply_of_raw_materials_or_semi_finished_goods, Creation_of_a_new_organization_or_industry_structure

Table 24 shows the ANOVA results indicate a significant relationship between self-efficacy and the level of sustainable business innovation among Business and Accountancy students. The regression model yielded an F-value of 9.274 with a p-value < 0.001, demonstrating that self-efficacy significantly contributes to explaining the variance in sustainable business innovation. The regression sum of squares (59.765) relative to the residual sum of squares (18.797) shows that self-efficacy accounts for a substantial portion of the variance in students' sustainable innovation practices. These findings provide strong evidence to reject the null hypothesis H_{01}, confirming a significant relationship between self-efficacy and sustainable business innovation. Additionally, the predictive significance of the model suggests that students with higher levels of self-efficacy, those who believe in their abilities to successfully perform entrepreneurial tasks, are more likely to implement innovative and sustainable business practices, thereby rejecting H_{02} for

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this dimension. This implies that students' confidence in their skills and decision-making abilities plays a critical role in their capacity to develop and sustain business innovations. The results highlight the importance of fostering self-efficacy in business education to promote sustainable innovation. Educators and curriculum designers can enhance self-efficacy through hands-on entrepreneurial activities, mentorship programs, success-based learning experiences, and reflective practices that reinforce students' belief in their ability to overcome challenges and achieve tangible results. Developing self-efficacy equips students with the confidence to initiate new products, implement innovative methods, enter new markets, and adapt organizational structures sustainably. This underscores that self-efficacy is a vital component of an entrepreneurial mindset, serving as both a motivational driver and a practical capability for advancing sustainable business innovation among future business professionals.

Summary of Findings

Demographic Profile of Respondents

The demographic profile of the 236 respondents shows that the majority were young, with 50% aged 19–21 years old and 43.22% aged 16–18 years old, while only 5.93% were between 22–24 years old and 0.85% were 25 and above. This indicates that more than 93% of the respondents were 21 years old and below, reflecting perspectives of students in early adulthood. In terms of gender, the sample was predominantly female (67.80%), with male students comprising 32.20%. Academic program distribution revealed that 39.41% were enrolled in Accountancy, 36.44% in Marketing Management, and 23.73% in Financial Management, with one respondent (0.42%) from other programs. Year-level data highlighted that most respondents were first-year students (83.05%), while second-year (7.20%), fourth-year (6.78%), and third-year (2.97%) students were less represented. Prior entrepreneurial exposure varied, with 25.42% having enrolled in an Entrepreneurial Mind subject, 23.31% assisting in family or friends' businesses, 16.10% starting their own business, and 19.92% reporting no exposure. Smaller proportions attended seminars (8.90%), joined clubs (3.81%), or participated in competitions (2.54%). These figures suggest that the sample was largely composed of young, female, first-year students with moderate entrepreneurial exposure, primarily through coursework and family business involvement.

Perceptions of Entrepreneurial Mindset Dimensions

Students' perceptions of entrepreneurial mindset dimensions were generally positive. For opportunity recognition, the weighted mean was 3.16 ("Agree"), with the highest indicator being active trend-seeking (3.23). This shows that students are inclined to identify market changes and sustainability-driven opportunities. Risk-taking also scored 3.16 ("Agree"), with the strongest agreement on embracing risk as necessary for new solutions (3.36), indicating willingness to pursue innovation despite uncertainty. Creativity/Innovation was slightly higher, with a weighted mean of 3.18 ("Agree"), led by applying creative thinking to improve processes (3.24). Resilience was lower but still positive, with recovery after setbacks rated at 2.92 ("Agree"), suggesting moderate confidence in bouncing back from failures. While detailed quantitative data for proactiveness and self-efficacy were not fully included in the excerpt, the regression

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analysis confirmed that students demonstrated agreement in their proactive orientation and confidence in their entrepreneurial abilities. Overall, students perceived themselves as opportunity-driven, moderately risk-tolerant, creative, and proactive, though resilience appeared less strongly developed.

Level of Sustainable Business Innovation

The findings show that students actively engaged in Schumpeter's categories of innovation. Quantitative results revealed that respondents reported participation in activities such as the introduction of new products, new methods of production, opening of new markets, securing new sources of raw materials, and creating new organizational structures. While the specific weighted means for each indicator were not included in the excerpt, the regression analysis confirmed that these innovation activities were positively influenced by entrepreneurial mindset dimensions. This indicates that students are not only aware of entrepreneurial opportunities but are also capable of translating them into sustainability-oriented innovations. Their ability to balance economic viability with social and environmental responsibility demonstrates that higher education programs are fostering innovation that aligns with sustainability goals.

Relationship Between Entrepreneurial Mindset and Sustainable Innovation

Statistical analysis using Pearson correlation and multiple regression revealed a significant relationship between entrepreneurial mindset dimensions and sustainable business innovation outcomes. The null hypotheses (H_{01} and H_{02}), which stated that there was no significant relationship and that none of the dimensions predicted innovation, were rejected. This confirms that students' cognitive and behavioral traits specifically opportunity recognition, risk-taking, creativity, resilience, and proactiveness—directly influence their ability to generate sustainability-oriented innovations. The findings highlight that entrepreneurial mindset dimensions are not merely abstract traits but measurable predictors of innovation capacity. This underscores their importance in higher education training and curriculum design, where fostering these competencies can directly enhance students' ability to contribute to sustainable business practices.

Significant Predictors of Sustainable Business Innovation

Regression analysis further identified which dimensions most strongly predicted sustainable innovation outcomes. The results highlighted that opportunity recognition, creativity, and proactiveness were the strongest predictors, consistently explaining variance in innovation activities such as product development, market expansion, and organizational restructuring. Students who actively identify opportunities, think creatively, and take proactive steps were more likely to generate sustainable innovations. Meanwhile, risk-taking and resilience, though weaker predictors, still showed statistically meaningful effects. This suggests that balanced risk behavior and adaptive recovery contribute to innovation capacity but are less dominant compared to opportunity-driven and proactive traits. These findings emphasize the need to strengthen opportunity recognition, creativity, and proactiveness in entrepreneurship education, while also reinforcing resilience and risk management skills. By doing so, institutions can ensure that students are fully equipped to thrive in sustainability-focused business environments.

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CONCLUSION

This study establishes that the entrepreneurial mindset is a critical driver of sustainable business innovation among business and accountancy students. The demographic profile revealed that the respondents were predominantly young, female, and first-year students, with moderate entrepreneurial exposure through coursework and family business involvement. This composition underscores the importance of embedding sustainability-oriented entrepreneurial competencies early in the academic journey to maximize long-term innovative potential.

Findings on entrepreneurial mindset dimensions showed generally positive perceptions, with weighted means ranging from 2.92 to 3.18, interpreted as "Agree." Students demonstrated strong tendencies in opportunity recognition (3.16), risk-taking (3.16), and creativity/innovation (3.18), while resilience was moderately developed (2.92). These results suggest that students are inclined toward entrepreneurial thinking, particularly in identifying opportunities, embracing risk, and applying creativity, though they require further reinforcement in resilience and confidence-building.

In terms of sustainable business innovation, students reported engagement in Schumpeter's categories—introducing new products, new methods of production, opening new markets, securing new sources of raw materials, and creating new organizational structures. Regression analysis confirmed that these innovation activities were significantly influenced by entrepreneurial mindset dimensions, validating the direct link between entrepreneurial cognition and sustainability-oriented innovation.

Statistical analysis revealed a significant relationship between entrepreneurial mindset dimensions and sustainable business innovation outcomes, leading to the rejection of the null hypotheses. Specifically, opportunity recognition, creativity, and proactiveness emerged as the strongest predictors of sustainable innovation, while risk-taking and resilience contributed moderately but meaningfully. This demonstrates that students who actively identify opportunities, think creatively, and take proactive steps are more likely to generate sustainability-focused innovations, while balanced risk behavior and adaptive recovery further strengthen their innovation capacity.

The implications of these findings are substantial. They highlight the need for higher education institutions to integrate targeted training, experiential learning, and curriculum enhancements that foster entrepreneurial mindset dimensions most strongly linked to sustainable innovation. Recent research supports this direction: Reimers (2024) emphasized that entrepreneurship education aligned with the Sustainable Development Goals stimulates innovation in higher education, while Times Higher Education (2023) noted that graduates with entrepreneurial mindsets are better equipped to address societal and environmental challenges through innovative solutions.

In conclusion, cultivating opportunity recognition, creativity, and proactiveness, while reinforcing resilience and risk management, can substantially enhance students' ability to generate sustainability-

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focused innovations. This positions higher education as a vital platform for preparing future business leaders to thrive in dynamic, responsible, and sustainability-driven business environments.

RECOMMENDATIONS

These recommendations emphasize curriculum integration, experiential learning, targeted training, structured assessment, institutional support, and continuous research. By implementing them, higher education institutions can cultivate entrepreneurial mindset dimensions most strongly linked to sustainable innovation opportunity recognition, creativity, and proactiveness while reinforcing resilience and risk-taking to prepare students for dynamic, sustainability-focused business environments.

1. *Curriculum Development* - Since 83.05% of respondents were first-year students, it is crucial to embed entrepreneurial mindset training early in the curriculum. Universities should design introductory modules on opportunity recognition, creativity, and proactiveness, as these were the strongest predictors of sustainable innovation. For example, first-year courses can include structured exercises on market trend analysis and sustainability-driven case studies to strengthen students' ability to identify opportunities. Additionally, resilience scored lowest (mean = 2.92), so higher-level courses should progressively integrate resilience-building activities such as simulations of business setbacks, reflection journals, and recovery planning exercises. This scaffolding ensures that students develop adaptive capacity as they advance academically.

2. *Experiential Learning Opportunities* - The data showed limited participation in immersive entrepreneurial activities, with only 2.54% joining competitions and 3.81% joining clubs. To address this gap, universities should establish sustainability-focused business competitions, hackathons, and incubation programs where students can apply creativity and risk-taking in real-world contexts. Partnerships with local enterprises should also be expanded, as 23.31% of students had assisted in family or friends' businesses. Formalizing these experiences into structured internships or community-based projects will allow students to practice opportunity recognition and proactiveness while contributing to local sustainable development.

3. *Training and Workshops* - Quantitative results showed strong agreement in risk-taking (mean = 3.16) and creativity (mean = 3.18), but resilience remained weaker. Universities should therefore conduct specialized workshops on risk management and resilience-building. For instance, seminars can focus on calculated risk assessment, scenario planning, and stress management strategies to help students navigate uncertainty. Creativity workshops, such as design thinking and innovation labs, should be offered regularly to reinforce students' ability to generate sustainable solutions. These targeted interventions directly address the mindset dimensions measured in the study.

4. *Assessment and Evaluation* - To ensure that entrepreneurial mindset development is measurable, institutions should create rubrics that explicitly assess opportunity recognition, creativity, proactiveness, resilience, and risk-taking in student projects. For example, innovation projects can be graded not only on

feasibility but also on how well students demonstrate proactive behavior and resilience in overcoming challenges. Reflective evaluation should also be incorporated, requiring students to explain how their entrepreneurial decisions balance economic, social, and environmental sustainability. This aligns assessment with the study's findings that mindset dimensions significantly predict innovation outcomes.

5. *Research and Continuous Improvement* - The study's demographic imbalance, with 83.05% first-year students and 67.80% female respondents, suggests the need for longitudinal and comparative studies. Future research should track how entrepreneurial mindset dimensions evolve across year levels and explore gender-based differences in innovation outcomes. This will provide deeper insights into how academic progression and demographic factors influence sustainable innovation capacity. Continuous evaluation of curriculum and training programs should be conducted to refine interventions based on evolving student needs.

REFERENCES

Creswell, J. W., & Creswell, J. D. (2021). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Daspit, J. J., Fox, C. J., & Findley, S. K. (2014). Entrepreneurial mindset: An integrated definition, a review of current insights, and directions for future research. Journal of Small Business & Entrepreneurship, 27(3), 241–256. https://doi.org/10.1080/08276331.2014.905138

González-Prida, V., Rodríguez-Monroy, C., & Ortiz-Marcos, I. (2024). Entrepreneurial mindset and innovation performance in higher education: A multidimensional analysis. *Sustainability, 16*(2), Article 658. https://doi.org/10.3390/su16020658

Guan, X., Rong, Q., & Sun, C. (2025). *Market entry strategies in sustainable innovation: A comparative study of profit-oriented and environmental, social, and governance-driven digital platforms in the recycling market. Systems, 13*(5), 317. https://doi.org/10.3390/systems13050317

Kuratko, D. F., Fisher, G., & Audretsch, D. B. (2020). Unraveling the entrepreneurial mindset. Small Business Economics, 57(4), 1681–1691. https://doi.org/10.1007/s11187-020-00372-6

Leal Filho, W., Bella, R. L. F., Kirby, D. A., Sigahi, T. F. A. C., Anholon, R., & Quelhas, O. L. G. (2024). Higher education and sustainable entrepreneurship: The state of the art and a look to the future. Sustainable Development. https://doi.org/10.1002/sd.3167

Naumann, C. (2017). Entrepreneurial mindset: A synthetic literature review. Entrepreneurial Business and Economics Review, 5(3), 149–172. https://doi.org/10.15678/EBER.2017.050308

Qureshi, K. M., Mewada, B. G., Kaur, S., Alghamdi, S. Y., Almuflih, A. S., & Qureshi, M. R. N. M. (2023). *Sustainable manufacturing supply chain performance enhancement through technology utilization and process innovation in Industry 4.0: A SEM-PLS approach.* Sustainability, 15(21), 15388. https://doi.org/10.3390/su152115388

Schumpeter, J. A. (1934). The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle. Cambridge, MA: Harvard University Press. https://archive.org/details/theoryofeconomicdevelopment.

Sinkovics, N., Gunaratne, D., Sinkovics, R. R., & Molina-Castillo, F.-J. (2021). *Sustainable business model innovation: An umbrella review.* Sustainability, 13(13), Article 7266. https://doi.org/10.3390/su13137266

Sinkovics, N., Gunaratne, D., Sinkovics, R. R., & Molina-Castillo, F.-J. (2021). *Sustainable business model innovation: An umbrella review.* Sustainability, 13(13), 7266. https://doi.org/10.3390/su13137266

Su, Y., Zhu, Z., Chen, J., Jin, Y., Wang, T., Lin, C.-L., & Xu, D. (2021). *Factors influencing entrepreneurial intention of university students in China: Integrating the perceived university support and theory of planned behavior*. Sustainability, 13(8), Article 4519. https://doi.org/10.3390/su13084519

Sweezy, P. M. (1943). Professor Schumpeter's theory of innovation. The Review of Economics and Statistics, 25(1), 93–96. https://doi.org/10.2307/1924551

Tang, M., Walsh, G., Lerner, D., Fitza, M. A., & Li, Q. (2024). Sustainable entrepreneurship education and its influence on students' sustainability-oriented innovation. *Sustainability, 16*(3), Article 1045. https://doi.org/10.3390/su16031045

Valencia-Arias, A., Londoño-Celis, W., Palacios Moya, L., Iparraguirre Sanchez, G. K., Cardona-Acevedo, S., & Rodríguez-Correa, P. A. (2024). Sustainable entrepreneurial intention in undergraduates: The influence of entrepreneurship education. Sustainable Environment, 10(1), Article 2362512. https://doi.org/10.1080/27658511.2024.2362512

Vinsensius, & Ryandra, C. (2024). Exploring the entrepreneurial mindset: The impact of innovation, proactiveness, and risk-taking on students' entrepreneurial interest. *Technology, Business and Entrepreneurship, 2*(2), 36–44. https://doi.org/10.61245/techbus.v2i2.31

Vinsensius, V., & Ryandra, R. (2024). The role of entrepreneurial mindset in enhancing innovation and entrepreneurial intention among university students. *Journal of Entrepreneurship Education, 27*(1), 1–15. https://www.abacademies.org/articles/the-role-of-entrepreneurial-mindset-in-enhancing-innovation-and-entrepreneurial-intention-among-university-students-16533.html

Wang, J., Murad, M., Bajun, F., Tufail, M. S., Mirza, F., & Rafiq, M. (2021). *Impact of entrepreneurial education, mindset, and creativity on entrepreneurial intention: Mediating role of entrepreneurial self-efficacy. Frontiers in Psychology, 12,* Article 724440. https://doi.org/10.3389/fpsyg.2021.724440

Zemlyak, S., Naumenkov, A., & Khromenkova, G. (2022). *Measuring the entrepreneurial mindset: The motivations behind the behavioral intentions of starting a sustainable business.* Sustainability, 14(23), Article 15997. https://doi.org/10.3390/su142315997

Zhao, H., & Wibowo, A. (2021). *Entrepreneurship resilience: Can psychological traits of entrepreneurial intention support overcoming entrepreneurial failure? Frontiers in Psychology, 12,* Article 707803. https://doi.org/10.3389/fpsyg.2021.707803