

Developing Future Green Entrepreneurs: The Role of Entrepreneurial Self-Efficacy and Growth Mindset in Higher Education: Evidence from Indonesia and Malaysia

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Abstract: *This study investigates the psychological-cognitive factors influencing green entrepreneurial intention among university students in Indonesia and Malaysia. While sustainable development requires multi-stakeholder participation, students represent a critical demographic for driving environmental change through entrepreneurship. Despite increasing environmental awareness, green entrepreneurial intention remains limited in developing countries. Drawing on Social Cognitive Theory, Growth Mindset Theory, and the Theory of Planned Behavior, this research examines how Entrepreneurial Self-Efficacy (ESE) and Growth Mindset (GM) shape students' intentions to pursue environmentally sustainable ventures. The study employs a quantitative methodology, surveying 445 students from four universities: Pasundan University, Esa Unggul University, INTI International University, and Universiti Malaysia Sabah. Data analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM) reveals that ESE positively influences GM ($\beta = 0.837$), ESE positively affects Green Entrepreneurial Intention (GEI) ($\beta = 0.385$), and GM demonstrates a stronger effect on GEI ($\beta = 0.543$). The model explains 70.0% of the variance in GM and 79.2% in GEI, indicating strong predictive power. Theoretically, this research extends sustainable entrepreneurship literature from structural approaches to psychological-cognitive perspectives in developing country contexts. Practically, the findings underscore the importance of integrating psychological capital development into entrepreneurship education, emphasizing experiential learning, incubation programs, and ecosystem-centered initiatives to foster students' confidence and mindset for sustainable enterprise creation.*

Keywords: Entrepreneurial Self-Efficacy; Growth Mindset; Green Entrepreneurial Intention; Sustainability; Higher Education; PLS-SEM

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Introduction

Building a sustainable economy requires alignment with the Sustainable Development Goals (SDGs), particularly through the transition to a green economy. In this context, green entrepreneurship has become a crucial driver of sustainability-oriented economic growth because it integrates economic, social, and environmental dimensions simultaneously (Devani & Ruparel, 2025). Together, these factors foster a proactive orientation that supports green entrepreneurial intention and sustainable innovation (Utami, 2025). As global environmental concerns continue to escalate, green entrepreneurship is gaining increasing attention from academics, policymakers, and industry practitioners as a strategic solution for sustainable development (Alshebami et al., 2024).

The role of higher education institutions is crucial in developing future entrepreneurs through entrepreneurship education and innovation ecosystems. Modern universities no longer focus solely on teaching and research, but also on developing entrepreneurial skills, creativity, and sustainable business development (Hindarsah et al., 2025). Entrepreneurship is widely recognized as a vital contributor to economic growth, job creation, and long-term national prosperity (Hindarsah et al., 2023). Therefore, universities are increasingly encouraged to support students in developing environmentally sustainable business ideas and green startups (Aurellia & Nuringsih, 2023). Thus, universities offer training facilities that enable students to meet current needs and help them start green businesses after they graduate (Teo et al., 2019). However, not much research has been conducted to date on how higher education affects the green entrepreneurial habits of college students in the Gen Z generation (Setiawan et al., 2024). Green entrepreneurship has become an important strategy in supporting sustainable economic development because green startups contribute to employment creation, innovation, and national economic growth (Shenkoya et al., 2023). However, green startups face greater uncertainty and regulatory challenges than conventional businesses, making psychological factors such as entrepreneurial self-efficacy and growth mindset essential for sustaining innovation and long-term competitiveness (Caliendo et al., 2023).

Although environmental awareness among students is increasing, not all students demonstrate strong intentions to establish green businesses. Previous studies found that students' green entrepreneurial intention remains relatively moderate, even among individuals who already possess positive attitudes toward sustainability issues (Saputri et al., 2025; Ip, 2024). This phenomenon reflects an "intention gap," where environmental concern does not automatically translate into entrepreneurial action (Islam & Al Mehdi, 2024). Furthermore, limited ecosystem support, restricted access to financing, and the lack of integration of green entrepreneurship education into university curricula continue to hinder the development of green entrepreneurial intention among students (Mawardi et al., 2025). Despite increasing academic interest in sustainable entrepreneurship, empirical evidence regarding the formation of entrepreneurial intention, particularly in emerging economies, remains limited (Khan et al., 2025).

Research on green entrepreneurship remains limited, particularly in developing countries, despite its urgency in addressing environmental and economic sustainability challenges

(Santika et al., 2022). Existing studies also indicate that entrepreneurial intention is influenced not only by knowledge or education but more strongly by internal psychological factors (Newman et al., 2019). Entrepreneurial self-efficacy has been identified as one of the strongest predictors of entrepreneurial intention because individuals with higher self-confidence tend to be more prepared to identify opportunities, manage risks, and start new businesses (Farrukh et al., 2021; Ghodbane & Alwehabie, 2023; Putra & Andiyani, 2021).

In addition to self-efficacy, growth mindset also plays an important role in shaping entrepreneurial intention. Individuals with a growth mindset tend to demonstrate higher creativity, resilience, persistence, and innovation engagement, which are essential in entrepreneurship (Burnette et al., 2013). Growth mindset also strengthens creative self-efficacy and supports sustainable business model innovation (Fitri & Pertiwi, 2019). Therefore, the intention to establish green startups is increasingly understood as being influenced not only by business knowledge but also by confidence in one's entrepreneurial abilities and the belief that these abilities can be developed through learning and experience.

Based on the above phenomena, the aim of this research is: to examine the influence of Entrepreneurial Self-Efficacy on Growth Mindset, to examine the influence of Entrepreneurial Self-Efficacy on Green Entrepreneurial Intention, and to analyze the influence of Growth Mindset on Green Entrepreneurial Intention. The uniqueness of this research is that it uses a cognitive psychological approach applied to green entrepreneurship, which is still relatively rare to research, especially in developing countries.

Literature Review and Hypothesis Development

2.1 Green Entrepreneurial Intention

Green Entrepreneurial Intention (GEI) can be explained through the Theory of Planned Behavior, where "Intentions are assumed to capture the motivational factors that influence a behavior" Ajzen (1991) Within this framework, perceived behavioral control is closely related to self-efficacy. Bandura (1997) defines that "Self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments." In the context of entrepreneurship education, meta-analytic evidence shows that "Entrepreneurship education has a positive and significant effect on entrepreneurship intention" (Martínez-Gregorio et al., 2021). More specifically in the green context, recent research confirms that "Green entrepreneurial self-efficacy significantly mediates the relationship between entrepreneurship education and green entrepreneurial intention" (Mambali et al., 2024). Furthermore, a growth mindset plays a crucial role in fostering perseverance and readiness to face challenges, as people with a growth mindset believe that their most basic abilities can be developed through dedication and hard work (Dweck, 2006). Therefore, educational interventions that strengthen self-efficacy and a growth mindset have a strong theoretical and empirical basis for improving GEI.

2.2 Entrepreneurial Self-Efficacy

Entrepreneurial Self-Efficacy (ESE) is defined as an individual's belief in their ability to initiate, manage, and achieve success in entrepreneurial activities (Duong, 2023; Pham & Le,

2023). Within the Social Cognitive Career Theory (SCCT) framework, ESE represents not only general self-confidence but also specific entrepreneurial competencies such as opportunity recognition, creativity, risk-taking, and resilience in facing business challenges. Tsai et al. (2014) explain that ESE reflects individuals' confidence in engaging in entrepreneurship, while Santos and Liguori (2019) emphasize that ESE enables individuals to mobilize motivation, cognitive resources, and strategic actions required to perform entrepreneurial tasks successfully. Therefore, ESE plays an important role in shaping entrepreneurial intention and entrepreneurial behavior.

Furthermore, Entrepreneurial Self-Efficacy functions as an internal psychological mechanism that strengthens persistence, adaptability, and innovation in entrepreneurship. Memon et al. (2019) state that self-efficacy influences how individuals respond to challenges, persist in difficult situations, and allocate effort toward entrepreneurial activities. In the context of startups, ESE supports opportunity exploration, creative thinking, product innovation, and commercialization strategies (Zhao et al., 2005). Previous studies also indicate that individuals with high ESE tend to have stronger entrepreneurial intentions, greater confidence in managing uncertainty, and higher levels of creativity and innovation (Wardana et al., 2020; Dheer & Castrogiovanni, 2023). Therefore, ESE is considered an important psychological factor that enables entrepreneurs to develop sustainable and competitive business models.

Hypothesis 1

H1: Entrepreneurial Self-Efficacy positively influences Growth Mindset.

Hypothesis 2

H2: Entrepreneurial Self-Efficacy positively influences Green Entrepreneurial Intention.

2.3 Growth Mindset

The concept of growth mindset is defined as the belief that personal attributes such as intelligence are flexible and can be developed (Dweck, 1999; Dweck et al., 1995). According to Yeager & Dweck (2020), a growth mindset is specifically "the belief that personal characteristics, such as intellectual abilities, can be developed," in contrast to a fixed mindset, which considers these abilities to be static. This mindset is relatively stable but can be changed by experience or context (Dweck, 2006; Heslin et al., 2020; Robins & Pals, 2002). More than just an abstract belief, a growth mindset forms a meaning system that includes an orientation toward learning goals, positive effort beliefs, and resilient attributions to failure. As explained by Yeager & Dweck (2020), "A growth mindset meaning system is the opposite [of a fixed mindset], involving learning goals, positive effort beliefs, and resilient (e.g., strategy-focused) attributions." The main goal is to form a psychological orientation that focuses on learning, where obstacles are seen as part of the process of self-development. This is reflected in how a person interprets failure. As Dweck (2006) asserts, "people with a growth mindset see failure as an opportunity to grow or improve in their knowledge and skills." Thus, the goal of a growth mindset is to shift an individual's perspective to see failure not as proof of incompetence, but as valuable data and an essential stepping stone to improving competence, which ultimately creates high psychological resilience as "one disposition that enables the nurturing of such high flexibility and psychological resilience (Dweck, 2006)"

The benefits of this belief and goal have been empirically proven in various aspects. In the context of performance, belief in one's ability to develop encourages active engagement in complex tasks, where research shows that individuals tend to “engage in creative activities (Karwowski & Brzeski, 2017),” “express higher problem-solving performance (Intasao & Hao, 2018),” and demonstrate “higher levels of motivation, engagement and effort, all of which contribute to enhanced in-role performance (Blackwell et al., 2007; Han & Stieha, 2020; Rogers et al., 2023).” In the realm of leadership and organization, the benefits of a growth mindset are to encourage a culture of innovation and adaptation, because this mindset “raises challenges to the status quo, fosters innovation and learning, is motivated to support experimentation (Kouzes & Posner, 2019),” and makes individuals more proactive in “taking control and continuing to modify both themselves and their organization in desired ways (Dweck, 2006).” More deeply, the benefits of a growth mindset include intrinsic psychological dimensions by providing meaning and purpose in work. Employees with this mindset view their work as meaningful because they see it as a platform for continuous learning and development. This is in line with the findings of Oh et al. (2024), who state that “they view their work as meaningful, as they view their work as a platform for continuous learning and development.” In other words, work is not merely an obligation, but is considered a means of personal growth. This belief arises because they believe in their ability to learn and develop. It is this belief that then encourages them to be more involved in tasks that have a real and visible impact. As explained in the same study, “believing in their ability to learn and develop, are more likely to engage in tasks that have a clear and identifiable impact.” Therefore, the benefits of a growth mindset not only improve performance but also enrich the work experience by instilling a greater sense of purpose and contribution.

Although research in the context of entrepreneurship is still limited, its benefits and objectives are highly relevant. This limitation is explicitly stated by Morris et al. (2023), who note that “it has received little attention from scholars of entrepreneurship.” This means that academic focus on growth mindset is still very lacking in the field of entrepreneurship. In fact, a mindset that emphasizes that “abilities are malleable” and “failure is a learning opportunity” has the potential to be a crucial psychological foundation for entrepreneurs. The goal is to build confidence to take action, where growth mindset training “may provide them with more confidence (i.e., entrepreneurial self-efficacy) in their ability to engage in new business practices (Morris et al., 2023).” In other words, this intervention aims to increase an entrepreneur's confidence to dare to take concrete steps in new business practices. The expected direct benefit is an increase in experimentation and new business initiatives. This is because “the concept of growth mindset portrays action (even failures) as opportunities for growth,” so that trained entrepreneurs will be “more likely to experiment with new business activities (Morris et al., 2023).” This explanation means that because this mindset portrays every action and failure as a stepping stone, they become more courageous in trying innovative business activities. Ultimately, this belief can trigger the emergence of ideas and initial steps in entrepreneurship, as it is concluded that they are “more likely to come up with and initiate entrepreneurial activity (Morris et al., 2023).” Thus, the definition of a growth mindset as a belief in the flexibility of potential is directly linked to its goal of building resilience and a learning orientation, which then produces concrete benefits in the form of improved performance, innovation, meaning of work, and potential for entrepreneurial action.

Based on Yeager & Dweck (2020), a growth mindset is not only a belief that intelligence can be developed, but also forms a meaning system consisting of three interrelated psychological dimensions. These three dimensions are explicitly described as follows:

1. Effort Beliefs

This dimension refers to how individuals interpret the role of effort in learning. Individuals with a growth mindset view effort as a way to develop abilities, not as a sign of a lack of talent. Conversely, a fixed mindset is associated with negative effort beliefs, namely the belief that the need to work hard reveals a fundamental inability. This is in line with “A growth mindset meaning system is the opposite, involving learning goals, positive effort beliefs, and resilient (e.g., strategy-focused) attributions (Yeager & Dweck, 2020).”

2. Goal Orientation

This dimension reflects differences in setting academic goals. Growth mindset is associated with learning goals, where individuals focus on mastering material and developing competencies, even if it risks academic performance. Conversely, fixed mindset tends to be associated with performance goals, particularly performance-avoidance goals. It is explained that, “mindset theory expects that the belief in fixed ability should be associated with a meaning system of performance goals (perhaps particularly performance-avoidance goals, which is the goal of avoiding situations that could reveal a lack of ability) (Yeager & Dweck, 2020).”

3. Attributions for Failure

This dimension refers to how individuals explain the causes of failure or academic difficulties. In a growth mindset, failure is attributed to factors that can be controlled and changed, such as inappropriate strategies or efforts (resilient attributions). Meanwhile, a fixed mindset is associated with helpless attributions, which is the tendency to blame a lack of fixed ability. It is explained that “helpless attributions in response to difficult situations (e.g., attributing poor performance to a stable flaw in the self, such as being ‘dumb’). A growth mindset meaning system is the opposite, involving resilient (e.g. strategy-focused) attributions. (Yeager & Dweck, 2020).”

Hypothesis 3

H3: Growth Mindset positively influences Green Entrepreneurial Intention.

2.4 Conceptual Framework

This study proposes a conceptual framework integrating Growth Mindset and Entrepreneurial Self-Efficacy as predictors of Green Entrepreneurial Intention. Growth Mindset is proposed to directly influence Green Entrepreneurial Intention while also indirectly influencing it through Entrepreneurial Self-Efficacy.

Research Methodology

This study used a quantitative explanatory research design to investigate the causal relationships among Entrepreneurial Self-Efficacy, Growth Mindset, and Green Entrepreneurial Intention. The quantitative approach was considered appropriate because the

study aimed to test theoretically grounded hypotheses using statistical analysis. The population consisted of students from four universities: Universitas Pasundan (Indonesia), Universitas Esa Unggul (Indonesia), INTI International University (Malaysia), and Universiti Malaysia Sabah (Malaysia), with a total of 445 valid responses collected. The sample exceeded the minimum requirement recommended by Krejcie and Morgan (1970) for large populations. Data were collected through an online questionnaire using Google Forms, and items were measured using a five-point Likert scale ranging from 1 (“Strongly Disagree”) to 5 (“Strongly Agree”). Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software. The analysis consisted of: Convergent validity assessment, Reliability assessment, Structural model evaluation and Hypothesis testing through bootstrapping

Results and Discussion

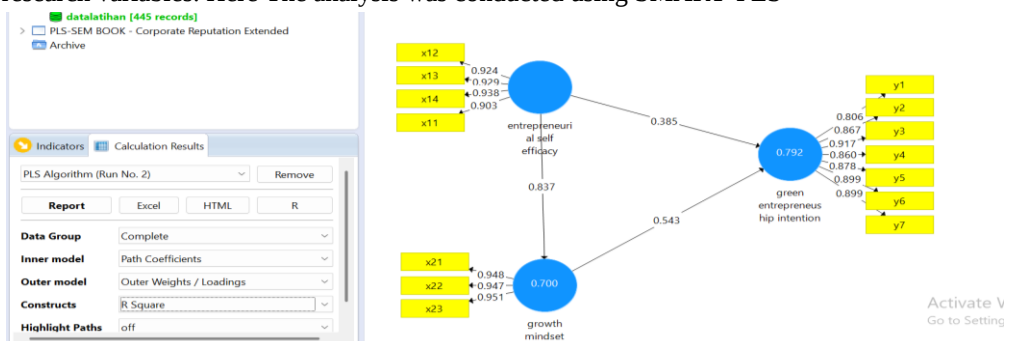
4.1. Result

4.1.1. Respondent Profile

Among the respondents, 62% were female and 36.4% were male and 1.6% did not provide an identity. Based on the university, it can be seen that 52% are from Pasundan University, 19.8% Inti University, 9.4% Esa Unggul University, 18.8% University Sabah Malaysia. Based on the Field of Study, it shows that 51.9% are Business, Economic, Management, 0.9% Engineering/Technology, 11.5% Social Science, 17.1% Law, 18.2% others. Based on semester, 60% are in semester 5–6, 18.9% in semester 1–2, 17.8% in semester 3–4, 1.6% in semester 7–8, and 1.8% above semester 8. Based on the entrepreneurship courses that have been taken, it shows that 83.1% have taken entrepreneurship courses, 16.9% have not. Based on the participation of incubated start-ups or training programs, it shows that 75.5% have participated, 24.5% have not.

4.1.2 Measurement Model Assessment

Based on the results of the analysis using SmartPLS, this study shows that entrepreneurial self-efficacy and growth mindset have a positive influence on green entrepreneurial intention. The growth mindset variable has a greater influence on green entrepreneurial intention than entrepreneurial self-efficacy. Furthermore, entrepreneurial self-efficacy also has a positive effect on growth mindset. The results also indicate that the research model has excellent levels of reliability and validity, making it suitable for analyzing the relationships between the research variables. Here The analysis was conducted using SMART-PLS



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Based on the results of data processing using SmartPLS in the figure, it can be interpreted that the research model consists of three latent variables: entrepreneurial self-efficacy, growth mindset, and green entrepreneurship intention.

- a) H1: Entrepreneurial Self-Efficacy has a positive and significant effect on Growth Mindset. Bandura (1997); Dweck (2006). The analysis results show that entrepreneurial self-efficacy has a strong positive influence on growth mindset, with a path coefficient of 0.837. This means that the higher an individual's confidence in their entrepreneurial abilities, the stronger their belief that these abilities can be further developed through effort and learning.
- b) H2: Entrepreneurial Self-Efficacy has a positive and significant effect on Green Entrepreneurial Intention. Bandura (1997); Ajzen (1991). The analysis results show that entrepreneurial self-efficacy has a positive influence on green entrepreneurship intention, with a path coefficient of 0.385. This means that the higher an individual's confidence in their entrepreneurial abilities, the higher their intention to pursue green entrepreneurship.
- c) H3: Growth Mindset has a positive and significant effect on Green Entrepreneurial Intention. Dweck (2006); Burnette et al. (2013). The analysis results show that growth mindset has a positive influence on green entrepreneurship intention, with a path coefficient of 0.543. This value indicates that the better a person's growth mindset, the higher their intention to engage in environmentally based entrepreneurship. This effect is greater than the direct effect of entrepreneurial self-efficacy on green entrepreneurial intention (H2).

In addition to the three hypothesized paths, the model's overall explanatory power was assessed using the coefficient of determination (R^2). The R-square value for the growth mindset variable of 0.700 indicates that 70% of the variation in growth mindset can be explained by entrepreneurial self-efficacy (H1), while the remaining 30% is influenced by other factors outside the research model. Meanwhile, the R-square value for the green entrepreneurship intention variable of 0.792 indicates that 79.2% of the variation in green entrepreneurship intention can be explained jointly by entrepreneurial self-efficacy and growth mindset (H2 and H3). This value is considered strong, indicating that the research model has good explanatory power.

All constructs demonstrated strong reliability and convergent validity.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
entrepren...	0.943	0.946	0.959	0.853
green ent...	0.949	0.952	0.958	0.767
growth m...	0.945	0.946	0.964	0.900

Overall, the test results indicate that all research variables met the criteria for reliability and convergent validity, making the research instrument suitable for analyzing the relationships between variables in the research model.

4.2. Discussion

One of the important pillars supporting sustainable economic development, particularly the Sustainable Development Goals (SDGs), is Green Entrepreneurship. Despite increasing

environmental awareness, the intention to establish sustainable businesses among university students remains weak. This indicates a gap between environmental awareness and entrepreneurial action (intention gap), indicating that internal psychological factors play a more dominant role than mere knowledge or awareness.

Many factors influence the formation of green entrepreneurial intention, one of which is entrepreneurial self-efficacy (ESE). This concept refers to an individual's belief in their ability to start and manage a business effectively. Within the framework of Social Cognitive Theory, Bandura (1997) asserts that self-efficacy determines how individuals think, act, and persist in the face of challenges. In the context of entrepreneurship, ESE is the primary foundation that encourages individuals to take risks and exploit business opportunities. This theory aligns with research by Newman et al. (2019), which states that entrepreneurial self-efficacy is the strongest predictor of entrepreneurial intention compared to other factors such as educational background or demographics. Another study by Farrukh et al. (2021) also shows that individuals with high levels of self-efficacy tend to have stronger intentions to start a business. In the context of green entrepreneurship, Ghodbane and Alwehabie (2023) found that self-efficacy has a significant influence on green entrepreneurial intentions, even when external factors such as institutional support are controlled. Furthermore, Caliendo et al. (2023) emphasizes that self-efficacy not only influences intention but also startup performance and sustainability, especially in the face of market uncertainty and innovation.

In this study, students with high self-efficacy showed a greater tendency to recognize environmentally-based business opportunities and the courage to implement those ideas. This suggests that the main obstacle to developing green startups lies not only in limited knowledge, but rather in low self-confidence to act. Besides self-efficacy, another equally important factor is a growth mindset, namely the belief that individual abilities can be developed through effort and learning. This concept was introduced by Dweck (2006), who differentiated between a growth mindset and a fixed mindset. Individuals with a growth mindset tend to view failure as part of the learning process, rather than as an indicator of incompetence. Research by Burnette et al. (2013) shows that a growth mindset significantly influences motivation, persistence, and self-regulation, which are essential components of entrepreneurship. In the context of innovation, Hu et al. (2021) found that a growth mindset enhances creativity and problem-solving skills. Furthermore, Morris et al. (2023) demonstrated that growth mindset training can enhance entrepreneurial action, especially in individuals with limited resources. Meanwhile, Oh et al. (2024) demonstrated that individuals with a growth mindset have higher levels of work engagement and work meaning. In the context of green entrepreneurship, which carries a higher level of risk than conventional businesses, a growth mindset is crucial because it can increase psychological resilience and courage in the face of uncertainty. Students with a growth mindset are not only more open to innovation but also better prepared to face failure in the process of building a sustainable business.

Furthermore, this study confirms that entrepreneurial self-efficacy is closely linked to the formation of a growth mindset (H1). Students who are more confident in their entrepreneurial abilities are also more likely to believe that these abilities can be further developed through effort and learning. This finding is consistent with research by Zeng (2025) and Dai et al.

(2023), who found that psychological confidence contributes to the development of a growth-oriented mindset and creative self-efficacy. Thus, entrepreneurial self-efficacy and growth mindset can be understood as complementary psychological resources: self-efficacy provides the confidence to act, while a growth mindset sustains persistence, learning orientation, and resilience. Together, both factors independently and significantly shape students' green entrepreneurial intention, as confirmed by H2 and H3.

Within the framework of the Theory of Planned Behavior (Ajzen, 1991), self-efficacy can be positioned as part of perceived behavioral control that directly influences behavioral intentions. Research by Mambali et al. (2024) also shows that green entrepreneurial self-efficacy mediates the relationship between entrepreneurship education and green entrepreneurial intention. This strengthens the argument that improving mindset alone is not enough; it must be accompanied by increased self-confidence for individuals to actually act. Simultaneously, the combination of self-efficacy and a growth mindset exerts a stronger influence on green entrepreneurial intention. Research by Khan et al. (2025) shows that psychological factors such as self-efficacy and mindset contribute significantly to shaping sustainable entrepreneurial intentions. Meanwhile, Alshebami et al. (2024) emphasize that internal individual factors are the main determinants in driving green entrepreneurial behavior. However, as explained by Shirokova et al. (2016), entrepreneurial intention only explains approximately 30% of actual behavior, so strengthening internal factors is necessary to increase the probability of business realization.

The implications of these findings are significant for higher education institutions. Universities play a vital role not only as knowledge providers but also as mindset builders and self-confidence builders for students. Research by Martínez-Gregorio et al. (2021) shows that entrepreneurship education has a positive influence on entrepreneurial intention. However, in the context of green entrepreneurship, research by Setiawan et al. (2024) and Mawardi et al. (2025) indicates that there are still limitations in integrating sustainability aspects into the curriculum. Therefore, a more comprehensive approach to entrepreneurship education is needed, one that focuses not only on the technical aspects of business but also on strengthening psychological capital, particularly self-efficacy and a growth mindset. Approaches such as project-based learning, business incubators, and experiential learning can be effective strategies in building students' readiness to develop green innovation-based startups.

Overall, the results of this study confirm that green entrepreneurial intention is not only influenced by external factors such as education and the environment, but is also largely determined by an individual's internal factors. Entrepreneurial self-efficacy and growth mindset are two key variables that interact in shaping green entrepreneurial intention. By strengthening these two factors, it is hoped that a generation of young entrepreneurs will be created that is not only innovative but also oriented towards environmental sustainability.

Conclusion

This study demonstrates that Entrepreneurial Self-Efficacy and Growth Mindset significantly influence Green Entrepreneurial Intention among university students in Indonesia and Malaysia. Growth Mindset emerged as the strongest predictor of Green Entrepreneurial

Intention, indicating the importance of resilience, adaptive cognition, and learning orientation in sustainable entrepreneurship contexts. Entrepreneurial Self-Efficacy also played a crucial role by strengthening students' confidence in their entrepreneurial capabilities. The findings confirm that green entrepreneurial intention is not shaped solely by environmental awareness or external support systems but also by internal psychological factors. Therefore, universities and policymakers should prioritize the development of psychological capital through experiential entrepreneurship education and sustainability-oriented innovation ecosystems to foster the emergence of future green entrepreneurs.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Alshebami, A. S., Fazal, S. A., Seraj, A. H. A., Al Marri, S. H., & Alsultan, W. S. (2024). Fostering potential entrepreneurs: An empirical study of the drivers of green self-efficacy in Saudi Arabia. *Discover Sustainability*, 5(1), 21. <https://doi.org/10.1007/s43621-024-00201-w>
- Aurellia, J., & Nuringsih, K. (2023). The Role of Green Entrepreneurial Orientation and Self-Efficacy to Encourage Student Intention in Green Entrepreneurship. *International Journal of Application on Economics and Business*, 1(1), 199–207. <https://doi.org/10.24912/ijaeb.v1i1.199-207>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman and Company.
- Burnette, J. L., O'Boyle, E. H., VanEpps, E. M., Pollack, J. M., & Finkel, E. J. (2013). Mind-sets matter: A meta-analytic review of implicit theories and self-regulation. *Psychological Bulletin*, 139(3), 655–701. <https://doi.org/10.1037/a0029531>
- Caliendo, M., Kritikos, A. S., Rodríguez, D., & Stier, C. (2023). Self-efficacy and entrepreneurial performance of start-ups. *Small Business Economics*, 61(3), 1027–1051. <https://doi.org/10.1007/s11187-022-00728-0>
- Devani, S., & Ruparel, D. N. (2025). *Green Entrepreneurial Intention: A Cornerstone for Building a Green Economy*. 10(4).
- Dheer, R. J. S., & Castrogiovanni, G. J. (2023). Cognitive adaptability's impact on entrepreneurial intent: The mediating roles of entrepreneurial passion and efficacy. *Journal of Business Research*, 160, 113798. <https://doi.org/10.1016/j.jbusres.2023.113798>
- Duong, C. D. (2023). A moderated mediation model of perceived barriers, entrepreneurial self-efficacy, intentions, and behaviors: A social cognitive career theory perspective. *Oeconomia Copernicana*, 14(1), 355–388. <https://doi.org/10.24136/oc.2023.010>
- Dweck, C. S. (1999). *Self-theories: Their Role in Motivation, Personality, and Development (1st ed.)*. Psychology Press. <https://doi.org/10.4324/9781315783048>
- Dweck, C. S. (2006). *Mindset: The New Psychology of Success*. Random House Publishing Group. <https://books.google.co.id/books?id=fdjqz0TPL2wC>

- Developing Future Green Entrepreneurs: The Role of Entrepreneurial Self-Efficacy and Growth Mindset in Higher Education: Evidence from Indonesia and Malaysia
- Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit Theories and Their Role in Judgments and Reactions: A Word From Two Perspectives. *Psychological Inquiry*, 6(4), 267–285. https://doi.org/10.1207/s15327965pli0604_1
- Farrukh, M., Raza, A., Sajid, M., Rafiq, M., Hameed, R., & Ali, T. (2021). Entrepreneurial intentions: The relevance of nature and nurture. *Education + Training*, 63(7–8), 1195–1212. <https://doi.org/10.1108/ET-01-2021-0028>
- Fitri, S., & Pertiwi, A. (2019). INNOVATION MINDSET MODEL AT THE EARLY STAGE STARTUP WITH BERKELEY INNOVATION INDEX APPROACHED. *Journal of Information System and Technology Management*, 57–70. <https://doi.org/10.35631/JISTM.413006>
- Ghodbane, A., & Alwehabie, A. (2023). Academic Entrepreneurial Support, Social Capital, and Green Entrepreneurial Intention: Does Psychological Capital Matter for Young Saudi Graduates? *Sustainability*, 15(15), 11827. <https://doi.org/10.3390/su151511827>
- Hindarsah, I., Kania, T. N., Diawati, P., & Fahrudin, A. (2025). Strengthening the entrepreneurial ecosystem through innovation: A case study of Pasundan University. *International Journal of Innovative Research and Scientific Studies*, 8(1), 1760–1769. <https://doi.org/10.53894/ijirss.v8i1.4801>
- Hindarsah, I., Yuce Sariningsih, Yusep Ikrawan, Heri Erlangga, Erik, & Andry Mochamad Ramdan. (2023). Model of Start Up Management to Strengthen Student Entrepreneurship Program in The MERDEKA Campus. *Quantitative Economics and Management Studies*, 4(1), 51–60. <https://doi.org/10.35877/454RI.qems1369>
- Intasao, N., & Hao, N. (2018). Beliefs About Creativity Influence Creative Performance: The Mediation Effects of Flexibility and Positive Affect. *Frontiers in Psychology*, Volume 9-2018. <https://doi.org/10.3389/fpsyg.2018.01810>
- Islam, M. R., & Al Mehdi, A. (2024). Bridging Climate Awareness and Sustainable Entrepreneurship: A Conceptual Framework Based on the Theory of Planned Behavior. *International Research Journal of Economics and Management Studies*, 3(7). <https://doi.org/10.56472/25835238/IRJEMS-V3I7P129>
- Karwowski, M., & Brzeski, A. (2017). Selfies and the (Creative) Self: A Diary Study. *Frontiers in Psychology*, Volume 8-2017. <https://doi.org/10.3389/fpsyg.2017.00172>
- Khan, S., Nazneen, A., Singh, M., Ali, I. S., Qazi, S., & Arafat, M. Y. (2025). The interplay of environmental awareness, education, and self-efficacy in shaping sustainable entrepreneurial intentions: An empirical study in India. *Discover Sustainability*, 6(1), 1321. <https://doi.org/10.1007/s43621-025-02185-7>
- Kouzes, T. K., & Posner, B. Z. (2019). Influence of managers' mindset on leadership behavior. *Leadership & Organization Development Journal*, 40(8), 829–844. <https://doi.org/10.1108/LODJ-03-2019-0142>
- Mambali, E. R., Kapipi, M. S., & Changelima, I. A. (2024). Entrepreneurship education and business and science students' green entrepreneurial intentions: The role of green

entrepreneurial self-efficacy and environmental awareness. *The International Journal of Management Education*, 22(2), 100987. <https://doi.org/10.1016/j.ijme.2024.100987>

Martínez-Gregorio, S., Badenes-Ribera, L., & Oliver, A. (2021). Effect of entrepreneurship education on entrepreneurship intention and related outcomes in educational contexts: A meta-analysis. *The International Journal of Management Education*, 19(3), 100545. <https://doi.org/10.1016/j.ijme.2021.100545>

Mawardi, M. K., Noor, A. Y. M., Edityastono, L., 'Atikah Zulkiffli, S. N., & Mashahadi, F. (2025). Green entrepreneurship in the era of sustainability: The relationship between intent, institutional support, and student behavior. *Cogent Business & Management*, 12(1), 2460625. <https://doi.org/10.1080/23311975.2025.2460625>

Memon, M., Soomro, B. A., & Shah, N. (2019). Enablers of entrepreneurial self-efficacy in a developing country. *Education + Training*, 61(6), 684–699. <https://doi.org/10.1108/ET-10-2018-0226>

Morris, S., Carlos, C., Kistruck, G. M., Lount Jr, R. B., & Thomas, T. E. (2023). The impact of growth mindset training on entrepreneurial action among necessity entrepreneurs: Evidence from a randomized control trial. *Strategic Entrepreneurship Journal*, 17(3), 671–692. <https://doi.org/10.1002/sej.1472>

Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of Vocational Behavior*, 110, 403–419. <https://doi.org/10.1016/j.jvb.2018.05.012>

Oh, J., Han, S. J., & Han, S. H. (2024). Linking a growth mindset, job crafting and in-role performance via meaningfulness at work: A moderated mediation model. *Journal of Workplace Learning*, 36(5), 364–381. <https://doi.org/10.1108/JWL-01-2024-0013>

Pham, H. H., & Le, T. L. (2023). Entrepreneurial education and entrepreneurial intention among higher education students in Vietnam: Do entrepreneurial self-efficacy and family support matter? *Higher Education, Skills and Work-Based Learning*, 13(2), 403–422. <https://doi.org/10.1108/HESWBL-10-2022-0213>

Putra, D. G. A. N., & Adnyani, I. G. A. D. (2021). Entrepreneurship Self-Efficacy and Entrepreneurial Motivation on the Entrepreneurial Intentions of Management Majors Student. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(5).

Santika, I. W., Wardana, I. M., Setiawan, P. Y., & Widagda, I. G. N. J. A. (2022). Entrepreneurship education and green entrepreneurial intention: A conceptual framework. *Linguistics and Culture Review*, 6, 797–810. <https://doi.org/10.21744/lingcure.v6nS1.2159>

Santos, S., & Liguori, E. W. (2019). How and When Is Self-Efficacy Related to Entrepreneurial Intentions: Exploring The Role of Entrepreneurial Outcome Expectations and Subjective Norms. *Revista de Estudios Empresariales. Segunda Época*, (1) . <https://doi.org/10.17561/ree.v2019n1.1>

- Developing Future Green Entrepreneurs: The Role of Entrepreneurial Self-Efficacy and Growth Mindset in Higher Education: Evidence from Indonesia and Malaysia
- Saputri, A. R., Subandriyo, & Hardiyan, M. I. (2025). Koperasi Desa Merah Putih Dalam Perspektif Pembangunan Desa Dan Tata Kelola Pemerintahan. *Journal of Society Bridge*, 3(2), 95–106. <https://doi.org/10.59012/jsb.v3i2.83>
- Setiawan, M. H., Amin, B. F., & Ratnawati, I. (2024). *Green Entrepreneurial Intentions and University Support for Green Entrepreneurial Behavior: A Systematic Literature Review*.
- Shenkoya, T., Hwang, K. Y., & Sung, E. H. (2023). Student Startup: Understanding the Role of the University in Making Startups Profitable Through University—Industry Collaboration. *Sage Open*, 13(3), 21582440231198601. <https://doi.org/10.1177/21582440231198601>
- Shirokova, G., Osiyevskyy, O., & Bogatyreva, K. (2016). Exploring the intention–behavior link in student entrepreneurship: Moderating effects of individual and environmental characteristics. *European Management Journal*, 34(4), 386–399. <https://doi.org/10.1016/j.emj.2015.12.007>
- Teo, T., Zhou, M., Fan, A. C. W., & Huang, F. (2019). Factors that influence university students' intention to use Moodle: A study in Macau. *Educational Technology Research and Development*, 67(3), 749–766. <https://doi.org/10.1007/s11423-019-09650-x>
- Tsai, K.-H., Chang, H.-C., & Peng, C.-Y. (2014). Extending the link between entrepreneurial self-efficacy and intention: A moderated mediation model. *International Entrepreneurship and Management Journal*, 12(2), 445–463. <https://doi.org/10.1007/s11365-014-0351-2>
- Utami, T. L. W. (2025). Green Entrepreneurial Intention: Impact of Environmental Awareness, Innovativeness, and Social Support. *The Proceedings of the ASEAN School of Business Network International Conference*, 1, 566–578. <https://doi.org/10.64458/asbnic.v1.46>
- Yeager, D. S., & Dweck, C. S. (2020). What can be learned from growth mindset controversies? *American Psychologist*, 75(9), 1269–1284. <https://doi.org/10.1037/amp0000794>
- Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The Mediating Role of Self-Efficacy in the Development of Entrepreneurial Intentions. *Journal of Applied Psychology*, 90(6), 1265–1272. <https://doi.org/10.1037/0021-9010.90.6.1265>